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ORIGINAL COMMUNICATIONS.

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*Observations on the Emmenagogue properties of Polygala Senega.*  
By CASPAR MORRIS, M. D., of Philadelphia.

Among the articles contributed to the materia medica by our own country, not one is more important than the *Polygala senega*. However little its virtues may be esteemed abroad, there are few American physicians who do not recognise its importance in the treatment of certain stages of croup and bronchitis. My present object, however, is not to celebrate its praises in affections in which its value is so generally appreciated, but to draw attention to its effects in a class of cases which often baffle the efforts of the physician and cause no little anxiety to the patient;—to properties which, though recognised before, have been overlooked or forgotten. It is now more than twenty years since my attention was first directed to the emmenagogue properties of this root. I cannot recal the source from which the knowledge of its virtues was derived, but am disposed to ascribe it to the teaching of Professor Chapman, as I find on reference to his work on therapeutics, that he speaks of them in very strong terms of commendation, and gives the credit of first drawing the attention of the profession to them, to the late Dr. Joseph Hartshorne. At the period to which I refer, I was induced to direct the employment of the *Senega* for

an unmarried lady, of about thirty years of age, suffering from suppression of the menstrual discharge of several months duration, combined with a catarrhal affection. So prompt was the restoration of the uterine discharge, that I considered it a mere coincidence, and remarked it as one of those cases of facts which may be misapplied so as to teach error instead of truth. Since then I have had ample opportunity to verify its claims to the credit of the result.

The tendency of its influence to the sexual and urinary organs has often since arrested my attention, in cases of children to whom I have given it for croup, in which I have found difficult micturition follow its use, sometimes to a degree quite inconvenient. Pereira mentions among its physiological effects, "increased secretion of urine and a feeling of heat in the urinary passages," and adds, "it appears to excite moderately the vascular system, to promote the secretions, (at least those of the kidneys and skin, *uterus* and bronchial membrane,) and to exert a specific influence over the nervous system;" he mentions the fact that "it has been used as an emmenagogue in amenorrhœa." In the *Dispensatory of Wood and Bache* there is a mere casual allusion to its having been recommended in amenorrhea; while Dr. Eberle refuses credence to the assertion that it possesses any emmenagogue properties. The strong testimony of Dr. Chapman deserves to be disseminated anew, as it may be overlooked among the many modern works on *materia medica* and pharmacy. I shall therefore furnish it for the benefit of your readers.

He introduces it first on the list of emmenagogues in the following terms:—

"To Dr. Hartshorne of this city, we owe the credit of having discovered the properties of this article as an emmenagogue. Conversing with him some years ago on the difficulty of managing certain forms of amenorrhœa by the common treatment, he told me that he thought he had used it with advantage in these cases. Confiding in the accuracy of his observations, I determined to lose no time in making trial of the medicine. This I have done since, both in my public and private practice, to a considerable extent, and with sufficient success to warrant me in recommending it as one of the most active, certain, and valuable of the emmenagogues. It may be used either in powder or decoction,



though I greatly prefer the latter mode. My rule in the administration of the medicine, is to direct about four ounces of the decoction, more or less, during the day, according to the circumstances of the case. But at the time when the menstrual effort is expected to be made, and till the discharge is actually induced, I increase the dose as far as the stomach will allow, having given sometimes as much as two ounces every hour. In the interval of the menstrual periods, I lay aside the medicine for a week or two, as, without these intermissions, if it does not lose its power, it becomes disgusting to the patient." Dr. Chapman directs the decoction to be made by putting one ounce of the bruised root in a pint of boiling water, in a covered vessel, and reducing it one third by slowly simmering; and recommends that its nauseating tendency should be averted by the addition of an aromatic bitter. I have not found my patients able to bear so large doses as those indicated by Dr. C., and have been wont to add liquorice root, which disguises the peculiar taste of the senega, and to continue the process until it is reduced to one-half. A tablespoonful three times daily of this strength, is generally tolerated without difficulty. My habit is, when I can determine the period at which the natural tendency to the discharge will occur, to give the medicine in these doses for a fortnight before; and then, as Dr. C. advises, I have suspended it until the same period is again approaching. The causes of interruption to the menstrual discharge, being various, it is of course impossible to find any remedy which will meet every case. Where it depends on debility, or accompanies an anemic state of the system, other remedies than senega are more appropriate, or should be conjoined with it. Iron, aloes and myrrh, in combination, form an excellent remedy in such cases. The senega is appropriate to those cases where the suppression has been caused by improper exposure, and to those very frequent instances in which there is but little disturbance of the general health.

Every practitioner in our large cities, must have had his attention arrested by the numerous calls for advice on account of obstruction, on the part of newly arrived immigrants; who complain of headache, and miserable general feelings, with swelling of their lower extremities. To what cause we are to ascribe the interruption of the natural functions, under such circumstances, it is difficult to say. The same result has been noticed in the cases of

young women coming from the country to Paris. It is not, therefore, due to any impression made by the sea atmosphere, but, very probably, is caused in both cases by a less nutritious diet than has been customary, and the confinement in a vitiated atmosphere.

In those cases in which hemorrhoids, or an irritable condition of the lower bowels, prohibit the resort to the formulæ into which aloes so generally enter, the senega may be resorted to with benefit, and also, when there is a diseased state of the ovaries or uterus itself. I have not yet tried it in cases of dysmenorrhœa, with scanty secretion, but believe it will be found a very admirable remedy for these cases, which are so distressing to the habitual sufferer, and vexatious to the physician. I shall certainly take an early opportunity to test its powers, combined with some of the narcotic extracts. Hellebore and hyoscyamus, have been the agents on which I have heretofore relied, with a good degree of satisfaction; and the senega appears to me to partake of the same character as the hellebore, without that tendency to purge, which is often displayed by the hellebore when given in full doses. I am aware that some of our best teachers are disposed to deny the existence of a class of remedies having a specific tendency to promote the menstrual flow, and rely on general treatment for the restoration of this function when suspended. This is, perhaps, a natural reaction from the disposition to rely on specific remedies in all cases. Either extreme, is unsound. We may not disregard the state of the general health, but must adapt our specific means to meet special indications. I know of no reason to doubt the tendency of certain remedies to produce an action on the uterus in its unimpregnated state, which would not lie with equal force against the action of calomel on the liver and salivary glands, or ergot on the same organ at the time of parturition.

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*Gastrotomy—(A case of Ovarian Dropsy, removal of sac and fatal termination.)* By A. H. GRIMSHAW, M. D., of Wilmington, Del., Member of the American Medical Association.

I consider that a man does not perform his duty to his fellow practitioners when he only publishes his successful cases, and, although I should have preferred to report this as a successful case, nevertheless, acting honestly and conscientiously, I give it as it occurred.



Edith Borkman, æt. 37 years, who has borne several children, one since the commencement of her dropsy, came into the Alms House of this county, Nov. 16th, 1848. She was then in bad health, cachectic, emaciated, and with great distension of the abdomen; there was also an immense ulcer occupying the umbilical region, and destroying all traces of umbilicus. Her case being diagnosed ovarian dropsy, to relieve urgent symptoms she was tapped by the attending physician. The ulcer healed almost immediately after this tapping, in consequence of the removal of the distension; her health also improved. After this, she menstruated once, and left the house, remaining out till March 12th, 1849, since which time, till the day of her death, she continued in the house, and was tapped eight times; at each tapping, about four gallons and a half of fluid were drawn off, sometimes straw colored, at others, chocolate-like.

She came under my care in July, and I performed the last tapping about ten days previously to the operation about to be described, and drew off five gallons of fluid. The operations of tapping were only resorted to when the woman's comfort and health began to suffer from the distension. Between the first two tapplings, eight months elapsed; after this, about four weeks was the average. Her health was good, appetite excellent, and spirits cheerful. Before coming under my care, I had mentioned to her that such tumours had been extracted, and as soon as I took charge, she requested me to perform an operation for her relief. Her case was one upon which I deliberated seriously, and one which was inspected by my medical friends of this city, both before and after the tapplings. Before the last, she measured 52 inches around the hips, and 39 from the scrobiculus cordis to the pubis.

Upon looking into all the authorities within my reach, and, as the patient herself expressed it, knowing that she must inevitably die, and that within a comparatively short time, if an operation would not prolong her life, I deemed an operation for extraction to be justifiable. I shall not attempt to prolong this article by arguing this point. Dr. Atlee has demonstrated the feasibility and justifiability of the operation, in the "*Amer. Med. Journal*," but let me give one quotation from Chelius' *Surgery*. "If the operation is to become established, of which I have the strongest doubts, it must be confined to examples of the malady where tapping has

been already so often performed as to preclude, from the experience of similar cases, any idea that it can ever be dispensed with, and when we are confident that great suffering must lead to early death." Again, "In such cases, if the diagnosis excludes the belief that there are serious adhesions, or malignant and solid growths complicating the tumour, and if the patient strongly desires it, the operation is defensible."

Late reports prove that it is defensible even when we have "serious adhesions," even when "solid growths" exist. In this case there was ovarian dropsy; we did not fear, but expected to meet serious adhesions; the patient "strongly desired it," even after I had told her that *one half* die under the operation.

On Wednesday, Sept. 4th, 1850, at 12 M., the pulse being 80 per minute, I commenced the operation. Present, Drs. Thomson, Askew, Bush, Porter, Baker, Barstow, and my colleague, Dr. Wilson, together with several medical students. The patient was under the influence of ether. I made an incision about 12 inches long, from a point about three inches to the right of the umbilicus, (to avoid the cicatrix) to the linea alba, above the pubis. This cut allowed a considerable quantity of water to escape. The parietes of the abdomen, I should mention, were œdematous, and the fluid had separated the fascia from the integuments to a considerable extent; there was also a thick layer of fat over the whole abdomen. In attempting to penetrate the fibrous layer, now exposed to view, my knife punctured the sac, which was adherent at this point and quite tense; this allowed the contents of the sac to escape. I then attempted to find the point of junction of sac and fascia, and imagining I had done this, separated the fascia on each side of the incision, before detecting the error. There was no appearance of muscular fibre. At last when I had almost despaired of succeeding in extracting the sac, on account of these difficulties, upon deepening my incision near the pubis, a thin layer of muscular fibres was severed, the remains of the pyramidalis. Penetrating at this point, I was enabled to detach the sac, with comparative ease, the adhesions all being round the point at which I had first entered, being an extension of the disease of the integuments, involving all the subjacent structures.



The tumour always had retained a position on the right side ; after tapping, small tumours could be detected attached to the sac. It was in reality a dropsy of the left ovary, the sac, when unattached had fallen over to the right side, twisting the pedicle, or broad ligament. I applied three ligatures to this and cut it off. The Fallopian tube appeared to be healthy. The uterus to all appearance healthy, confirming our opinion formed by an examination per vaginam. The right ovary was larger than natural, more solid and whitish coloured. We closed up the wound ; the patient was exceedingly feeble, and still under the influence of ether, and refused to take stimulants. She had lost a large quantity of blood, part from the wound in integuments, and part from several small vessels wounded in attempting to separate the fascia ; torsion was used to each vessel as soon as it was wounded.

The wound was dressed and the patient put to bed. There was great restlessness and complaint of heat of body, also great thirst, pulse feeble and apparently rising ; stimulants were administered freely, with an anodyne. Until 4 P. M., although the case presented a decidedly unfavorable appearance, we had hope. After 4 o'clock she sank fast, and died at 5 o'clock 10 minutes.

The next morning, upon examining the cavity of the abdomen, we found that about four ounces of blood had escaped into the cavity of the peritoneum, and was mixed with some of the fluid from the sac. The right ovary, upon cutting it open, was found to contain several small cysts.

Notwithstanding the sudden and unfortunate termination of this case, I should give my voice for the operation. I would beg the medical gentlemen who dread the knife, and shudder at the unfortunate termination of a surgical case, to take the scalpel and operate on their *dead patients* ; let them, after dissection has revealed to them mistakes in diagnosis, hidden maladies not " dreamed of in their philosophy," be disposed to be charitable, and acknowledge that they have not only failed to relieve their patients but sometimes have not applied the correct treatment. Rather attribute the fatal issue of this operation to my want of skill, than to the unjustifiability of the operation. I consider it more proper than tying the primitive carotid for the cure of erectile tumors on the head and face, and I shall under like circumstances, if my patient will consent, operate again.

[We commend the honesty and moral courage of our correspondent in thus reporting his unsuccessful case, although we regret its termination. If all were equally fearless, this, as well as some other heroic operations, would lose much of their eclat, a great portion of which is to be traced to the fact that the *whole truth* is not divulged.—ED. EXAM.]

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*Hospital Cases.* Reported by J. M. STEINER, M. D., Assistant Surgeon U. S. Army, Fort Graham, Texas.

Private White of "I" Company, 2d Dragoons, came into the Hospital, on the 11th of November, 1849, with the conjunctiva and cornea of the right eye severely inflamed. Constitution naturally strong, but depraved by vicious habits; complained of great pain in and around the orbit, and states that his eye became affected on the 6th. The inflammatory symptoms being high, he was bled copiously from the arm; cups were applied to the right temple; a solution of nit. argenti xx. grs. to the ounce of water, dropped in the eye, *ter die*; bowels freely moved, and a mercurial course adopted. Under this treatment the inflammation rapidly subsided. On the 25th the left eye became involved, but the inflammation disappeared in a few days, the nit. argenti alone being used. The eyes remained weak and irritable until the 20th of January, when the following complication occurred. From the appearance of the right eye, it seemed as if the crystalline lens had become detached on the inner side, from its attachment to the hyaloid membrane, which protruded into the anterior chamber, in the form of a small, semi-transparent pouch. He complained of a dull, aching pain, in and about the orbit, and the right temple. Several ounces of blood were abstracted by means of cups from the temple; blisters applied back of the ears, and the mercurial treatment resumed. On the 25th the pain had subsided; gums slightly touched; pouch gradually enlarging and assuming a hazy, or less transparent hue. Feb. 10th, anterior chamber nearly filled with pouch, which has assumed a milky color; vision almost entirely destroyed. From this time, until the 23rd of March, when the company to which he belongs, left this Post, no appreciable change took place. Among other medicines, the iodide of potassium was administered, but without benefit. If the hyaloid membrane



has not become disorganized—which I believe to be the case—possibly an operation might effect a radical cure.

Private Edward Capon, of "H" Company, 8th Infantry, aged 31 years, of sanguine temperament, was received into the Hospital on the 3rd of March. He complained of violent pain, extending from the precordia, to the back, shoulders, and back of the neck, and running down the left arm as far as the elbow. There was considerable dyspnœa; panting respiration; fever, and a firm, full, sharp pulse, beating 115 per minute. The head, neck, and shoulders, drooped forward, and he was either unable or afraid to assume a straight position. On examining the lungs by auscultation and percussion, no morbid symptoms could be detected. Directing him to hold his breath, I applied my ear over the region of the heart, which I found to be the part affected. A rough grating, friction sound, could be distinctly heard, synchronous with the systole of the ventricles. No additional morbid sounds could be heard. The dulness in the region of the heart, did not appear to extend over a greater space than is usual in health. As this man had been affected several times, within the last twelve months, with acute articular rheumatism—the last attack occurring in the preceding month—I concluded his present complaint to be rheumatic carditis, or pericarditis. Fifteen ounces of blood were taken from the arm, and a dose of xx. grs. of calomel, with xv. grs. of Dover's powder administered. A purgative of senna and salts was given in the afternoon. At 9 P. M. cups were applied to the left side of the chest, and between the shoulders, and twelve ounces of blood procured. Ten grains of calomel, and one of opium were directed to be taken every six hours. The friction sound could still be heard on the 4th, but not so distinctly as on the day previous; the febrile symptoms, had considerably abated; the distressing dyspnœa lessened, and the pain moderated. Calomel and opium continued. On the 6th, there was no fever; pulse 96, irregular, and devoid of strength, pain slight; the gums being touched by the calomel, it was discontinued and the impression kept up, by small doses of blue mass, given night and morning. On the 6th, a blister was applied over the region of the heart. On the 12th, he was able to walk about the wards. The cardiac symptoms, with the exception of the friction sound, recur-

red on the 24th, but in a milder form. He was relieved by cups, and a few doses of calomel, conjoined with the extract of aconite. At this date, March 31st, he is free from pain, and the sounds of the heart appear normal, though somewhat less distinct. I believe that the pericardium has become adherent to the heart. The patient is pale, weak, and emaciated, and I do not think will ever be completely restored to health.

Private Fink, of "A" Company, 2nd Dragoons, was received in the Hospital on the 15th of March, with a compound fracture of the bones of the right leg. The fracture was occasioned by a kick from a horse, as the man attempted to mount him. In falling the foot was bent backwards on the calf, and the upper fragment of the tibia, tore through the soft parts. On the 14th, the day previous to that on which the accident occurred, I had accompanied a scout into the Comanche Country, and did not return until the 18th; so that I did not see the patient till the 4th day after the receipt of the injury. The tibia was obliquely fractured, a little below its middle, and the lower end of the upper fragment denuded for three-fourths of an inch of the periosteum, protruded two inches and a half from a lacerated and contused wound in the soft parts, on the inner and anterior part of the leg; the fibula was fractured an inch and a half higher up, but did not appear externally. In consequence of the wound furnishing a ready outlet for the fluids, but little swelling had ensued; and the man being of a strong and robust constitution, I concluded to try and save the limb. I thought it advisable to remove that portion of the tibia divested of its investing membrane, and it was therefore excised, when the remaining portion was drawn within the wound, which was closed as far as practicable, by means of sutures and adhesive straps. The patient was placed on his right side, with the leg partially flexed resting on a pillow, and lint saturated with cold water, kept applied to the wound. The discharge from the wound consisted of serum, mixed with blood. Considering the extent of the injury, there was but little constitutional disturbance; the skin was hot; pulse full and strong, and the bowels torpid, but these symptoms abated after the operation of a brisk cathartic. On the 20th, the limb was placed in a fracture box, the flexed position changed to the extended, and the cold applications being



agreeable to the patient, continued. The wound gradually healed by granulation, and on the 9th of April, the limb was placed in Dessault's apparatus for fractured thigh, and extension and counter extension made. The heel was placed in a padded ring, and daily bathed with a mixture of whiskey and water, with the view of preventing, if possible, excoriation, yet a bad sloughing sore ensued, which gave the patient considerable pain, and myself much annoyance; no other unpleasant symptoms occurred. The splints were removed on the 20th of May; the injured extremity is from a half to three fourths of an inch shorter than the sound one. The union of the tibia, is by bone, and without deformity. In consequence of the overlapping of the fractured ends of the fibula, firm union of that bone, had not, I think, taken place; and if it has not, the limb will scarce be of much practical use, till the fibula is cut down upon, and the overlapping portion excised. The patient left this post on the 23rd of June to join his Company at Fort Croghan.

August 16th. I have this day ascertained from the Captain of his company, that the trip from this post to Fort Croghan, excited inflammation between the fractured ends of the fibula, resulting in firm union.

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*Case of Osseous Deposit within the nervous pulp of a Molar Tooth.*

By S. S. HORNOR, Dentist.

About two months since, I was waited on by a young lady, a member of one of our most respectable families for the purpose of having the first superior molar tooth (left side) filled. On examination, the tooth presented but a slight decay, yet it was so exceedingly sensitive, as to require a mild application for the purpose of allaying the sensibility before filling it; after which I succeeded in plugging it with gold, to my satisfaction, and as I had reason to hope, effectually preserved the tooth.

On Monday last, however, I was called to see her, when she complained of constant pain in the tooth, and was also suffering from a bilious attack, for which my eminent friend, Prof. Mitchell, was attending her.

As she was unwilling to submit to leeching, an opium plaster was prescribed, without the desired effect, and on Wednesday last,

I extracted the tooth, which I found highly inflamed, the nerve entirely dead, and the periosteum of the fangs in a suppurative state. Upon further inspection, its singular appearance induced me to break it, for the purpose of examining the nervous pulp, which had assumed the character of a gristly mass, of a blood-red color, surrounded by a sero-sanguinolent liquid, containing in the very centre, and constituting about two-thirds of the whole mass, a semi-transparent bony substance, so hard as to resist the point of a penknife.

After freeing the bone from the surrounding substance, and placing it under the field of a microscope, of moderate power, it presented the appearance of a transparent and irregular pebble, with many projecting points, beautifully rounded off.

Oudet describes bony formations within the tooth from altered secretions of the pulp, in *Dictionnaire de Médecine*, vol. 1, p. 186, but, this is the first case of the kind ever met with in my own practice. I have therefore, taken the liberty of sending you a description of it, with a request that you will give it a place in your valuable journal.

*Philadelphia, Sep. 21st, 1850.*

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*Case of Extra Uterine Pregnancy, of over twenty years standing.*

By WM. D. CHRISTIAN, M. D., of *Appomattox Co., Virginia.*

Mrs. T. aged about 40. In the early part of the summer of 1848, Dr. D. and myself were called to visit Mrs. T. We found her suffering with violent pain in the abdomen, attended with obstinate constipation. On making a minute examination of the case, we found a considerable tumour, occupying the right iliac and right lumbar regions. Inquiry being made in relation to said tumour, duration, &c., we received from her the following statement. About twenty years ago, and not long after her marriage, she conceived, or felt all the symptoms of a conception, passed through the regular stages of pregnancy, quickening at regular time, &c., and at the end of her full term, 9 months, she was taken with ordinary labour pains. In anticipation of a speedy delivery, a midwife was summoned. After remaining in labour for a day or two, (during which time she felt distinctly the motions of the fœtus,) the



motions of the foetus suddenly ceased, and very soon after the labor pains subsided. A distinguished physician of Campbell county, Dr. S., was then called in to see her. The following is an extract from a letter received from him, in answer to inquiries made by us of him in relation to this case. "I visited Mrs. T. on the 8th day of *December*, 1827, the old lady in attendance, then supposed her to have been in labor a day or two, and from the history of the case I presumed she was correct; upon examination I found the *parts* moderately dilated, and in some short time after the examination there were expelled from the uterus some two or three bunches of hydatids, varying in size from large shot to partridge eggs. After this she became much relieved, and in an hour or two I left her again in the hands of the midwife, who informed me afterwards that she continued to improve. Early in the year 1828, she removed from the neighborhood, and I saw her no more until the 9th January, 1833, when, on examination, I found the tumour described by you. I did not renew my visit nor did I have any conversation with her on this subject, until the 5th of August, 1843, when I was again called to see her, renewed my examination, and then became fully convinced it was a case of extra uterine pregnancy, (having had in the meantime, a case similar to your description of Mrs. T.'s, excepting that the woman had no children after this conception, nor was there any ossification of the placenta; this case was one of twenty-five years standing.) I made known to Mrs. T. at this time, my opinion of her case, and she requested me to make a post-mortem examination at her death, and, 'ascertain all about the matter.' I need not add that I am truly gratified you have done so."

During our attendance on Mrs. T. she exhibited signs of having again conceived. This was her eighth conception after the appearance of the tumour. She was then the mother of seven living children. On the 9th December, 1848, we were summoned to attend her in labor with this eighth foetus; the labor was an ordinary one, the tumour not at all interfering; she did remarkably well—getting up unusually soon. Early in January she left the neighborhood, and was taken ill soon after her arrival at her new home; of which sickness she soon after died. We were requested by the physician who had charge of the case in her last illness, to aid him

in making a post-mortem examination. On opening the abdomen, we found a compact tumour, (resembling in shape and appearance an ostrich egg, though much larger,) adhering closely to the walls of the abdomen anteriorly, and completely enveloped in a bony structure, except the upper part, which was the cranium of the fœtus. On cutting through this bony envelope or sack, we found a perfect child, very much compressed, occupying the smallest possible space, and about the size of a six or seven months fœtus, but as perfect in all respects as a nine months one, and not in the least degree decomposed. The cord was entire, and adhering to the inner part of the sac, which was of a soft bony structure as before remarked, and evidently the placenta. The edges of this bony placenta were firmly united to the frontal, parietal and occipital bones, thus, with the cranium of the fœtus, forming a complete osseous sac; there were also attachments at the elbows and knees. In this case nature had protected the mother from danger, by making a covering for the fœtus of the placenta and converting this into an osseous structure. I am not aware of any case being reported in which the child was enveloped in a bony sac. Death in Mrs. T.'s case was purely mechanical; by getting up too soon after delivery, and while the muscles of the abdomen were relaxed, the tumour by its gravity fell into the pelvis, (drawing the abdominal parietes after it) and thereby pressing on the large intestine, and stopping the alvine discharges, &c., thus causing death. As a matter of course, the left ovary was in a healthy condition, for she could not have conceived after this case of extra uterine conception had it not been so, unless we suppose the right ovary was healthy, with this unusual condition of things in its region, which was not true in this case, and is not likely to be in any other case like it.



*Case of poisoning by the berries of the Swamp Dogwood.* Reported by W. W. JOHNSON, N. C., Student of Medicine.

August 17th, the writer received an urgent message to visit ——— aged 4 years, who was reported dying. Found the patient in an alarming condition; there seemed to be a total deprivation of muscular power; deep and extreme coma; cold extremities; pulse weak and flickering; insensibility to questions and pinches; dilatation of pupil, and the iris so insensible that a candle held in close proximity to it did not affect it; in fact there seemed to be a general paralysis of the entire system, both nervous and muscular.

Three hours before I saw him he was attacked with a most obstinate vomiting, and while he could talk complained of pain in stomach and bowels; but at time of visit did not make any complaint—he was speechless. There was considerable dilatation of the abdomen, giving a tympanitic sound upon percussion.

Seeing the patient evidently sinking, I prescribed and administered 30 gtt. of spts. ammoniæ aromaticus, which was swallowed with difficulty, but a portion passed in the stomach, and in a few minutes gave a sufficient impetus to the languishing circulation. The symptoms were so obscure that the writer was at a great loss to account for the condition of the child.

Upon inquiry of the attendants as to what the child had been eating, I was informed by its mother and others that it had eaten nothing more than its ordinary diet; but a little girl, some few years older than the patient, said, "Milton had been eating some berries." She could not tell me what kind, and at my request went and brought a bunch from the meadow where the child had found them, and they proved to be the swamp dogwood.

Considering the time and the already excessive vomiting, I could anticipate no benefit from an emetic, and being apprehensive that there was a quantity in the bowels, and deeming a prompt cathartic essentially requisite, I prescribed 1 gtt. of oleum tigllii, mixed with molasses and placed far back on the tongue; this was swallowed, and in an hour and a half the child so far revived as to be able to drink a portion of a decoction of senna, which, with the oil, produced in a very short time several copious alvine dejections, mixed with which was a large quantity of the berries alluded to.

Next' morning the child was as well as usual, with the exception of a very marked weakness, and recovered in a few days without any relapse whatever. [We are disposed to attribute the extreme symptoms in this case to over distention rather than to any poisonous properties of the berries of the swamp dogwood, inasmuch as the fruit of the whole genus is innocuous, and in many instances used as food. This opinion would seem to be confirmed by the relief afforded by purgation.—ED.]

*Wills' Hospital—Service of DR. JOHN NEILL. Cases discharged from July 1st to October 1st, 1850.*

	Cured.	Relieved.	Incurable.
Amaurosis,	0	2	0
Closure of the pupil,	1	0	1
Amaurosis and cataract,	0	1	0
Catarrhal conjunctivitis,	2	0	0
Acute        "	3	0	0
Chronic       "	3	0	0
Granular       "	2	2	0
Cataract,	0	1	0
Amblyopia,	0	1	0
Scrofulous corneitis,	1	0	0
Injury of the eye,	1	1	0
Staphyloma scleroticæ,	1	0	0
Pustular ophthalmia,	2	0	0
Inflammation of the orbit,	1	0	0
Ophthalmia tarsi,	3	0	0
Ulcer of the cornea,	4	0	0
Iritis,	1	0	0
Hypopion,	0	1	0
Entropium,	0	1	0
	25	10	1

*Wills' Hospital Dispensary—Cases treated.*

Acute conjunctivitis,	10	Ulcer of the cornea,	5
Chronic       "	9	Granular lids,	7
Catarrhal       "	11	Amaurosis, (partial)	11
Scrofulous       "	13	Ophthalmia tarsi,	9
Pustular       "	7	Tumor of the lid,	2
Purulent       "	4	Adhesion of the lid to the globe,	1
Corneitis,	3	Inflammation of lach'l sac,	2
Iritis,	6		
Retinitis,	1	Total	101

*Conjunctivitis.*—The chronic, catarrhal, and granular forms of conjunctivitis, were treated chiefly by strong solutions of the nitrate of silver, alternated occasionally as the more active symptoms sub-



sided with the sulphate of copper in substance, and the liquor plumbi sub-acetatis. Under this plan the cases improved satisfactorily.

*Corneitis*.—In the single case discharged cured, the disease occurred in a scrofulous subject, and the treatment was modified accordingly. During the active stage of inflammation, the mild chloride of mercury was cautiously used in connection with the sulphate of quinine. By this combined plan the disease was rapidly subdued, and only a slight opacity remained as the result of the corneitis. Great importance was attached by Dr. Neill to the administration of tonics in connection with mercurials in the treatment of strumous corneitis.

*Photophobia*.—The intolerance of light in cases of strumous ophthalmia, was readily subdued in a large number of cases by the external application of the tincture of iodine, painted freely over the brows, temples, and upper portions of the cheek, with a camel's hair pencil.

*Staphyloma Scleroticæ*.—Michael Faulker, a common laborer, æt. 37, a native of N. Y., having good general health, was admitted to the hospital, July 30, 1850, with obscure disease of the right eye. He applied for relief because of the sympathetic irritation which the diseased eye kept up in the left, or sound one. He came laboring under great anxiety of mind, as he had been told by high surgical authority that the disease was malignant. After carefully examining his diseased eye, Dr. Neill was satisfied that the disease was *not* malignant, and he admitted him with the intention of operating for his relief, by discharging the contents of the globe and allowing it to collapse. At the time of his admission, the globe was so much distended, that the lids would not close over it; the cornea was opaque and conoidal, and at the external angle of the eye, the sclerotica was thinned and distended, so as to form a slightly conical tumour, of a leaden or purplish hue. The conjunctiva was in a condition of chronic inflammation. Some years before, he had this eye injured in a stone quarry; inflammation of the eye followed, which in three months time subsided, leaving the eye sightless. He had suffered often since then with attacks of inflammation up to the time he applied for admission to the hospital. Five years ago, the globe began to enlarge, and continued gradually to increase, without causing him pain or any

other inconvenience, except the frequent inflammatory attacks when exposed. July 12, Dr. Neill determined to operate; the patient was placed upon the operating table, and with a Beer's knife a section of the cornea was made, as in the operation for the extraction of cataract; the aqueous humour, and the lens, which was opaque and partially dissolved, escaped. Behind the position of the lens appeared a dense septum, this was torn away with the curette, and immediately a large quantity of dark colored fluid, seeming to consist of disorganized vitreous humour and blood, flowed from the globe; this fluid continued to flow for half an hour, during which time the patient was left upon the table, with the lids closed over the globe. The blood was probably derived from the rupture of the vessels of the choroid coat, when the great pressure of the fluid which distended the globe was removed. For two days after the operation, the patient seemed to do well, but on the third, the eye became greatly distended, and exceedingly painful. By the use of soothing applications and anodynes, the pain subsided in a few days. During the third week the globe began to diminish in size, and continued gradually to become smaller until August 31, when he was discharged entirely relieved; the globe had resumed its natural shape and size, and the conjunctivitis was completely removed. The history of this case seems to illustrate emphatically the importance of a correct diagnosis in certain forms of ophthalmic disease.

A. F. MAC INTYRE, M. D.,  
Resident Physician.

*Wills' Hospital, Philadelphia, October, 1850.*

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*Pennsylvania Hospital—Surgical Wards—Service of Dr. NORRIS.  
Cases discharged from Dec. 1st, 1849, to Jan. 1st, 1850.*

Disease.	Cured.	Average time under treat- ment in days	By re- quest.	Average time in days under treatment.	Died.	Average time in days under treatment.	Tot.
Abscess - -	3	11.3	1	7	0	0	4
Burns - -	1	4	0	0	0	0	1
Cataract - -	0	0	1	79	0	0	1
Cirsocele - -	1	16	0	0	0	0	1
Contusions - -	2	7	0	0	0	0	2
Fistula in ano -	1	63	0	0	0	0	1
Fractures, 18 simple 11, viz.:							
Clavicle -	2	39	0	0	0	0	2
Condyle of humerus	1	45	0	0	0	0	1
Forearm -	3	46	1	19	0	0	4
Femur - -	1	111	0	0	0	0	1
Humerus - -	1	41	0	0	0	0	1
Nose - -	0	0	1	4	0	0	1
Patella - -	1	45	0	0	0	0	1
Compound, 7, viz.:							
Fingers - -	4	33.5	0	0	0	0	4
Femur - -	0	0	0	0	1	6	1
Cranium - -	0	0	0	0	1	5	1
Leg - -	2*	257.5	0	0	2	6.5	4
Toes - -	1	46	0	0	0	0	1
Gonorrhœa - -	1	35	0	0	0	0	1
Hydrocele - -	2	20	0	0	0	0	2
Inflammat'n of hand	1	25	1	1	0	0	2
"      knee	1	54	1	150	0	0	2
"      foot	1	24	0	0	0	0	1
Necrosis - -	1	17	0	0	0	0	1
Ophthalmia - -	1	11	0	0	0	0	1
Paronychia - -	1	49	0	0	0	0	1
Porrigo scutulata	1	28	0	0	0	0	1
Sub-luxation -	1	11	0	0	0	0	1
Syphilis - -	6	39.3	2	8	1	4	9
Ulcer - -	2	29.5	1	25	0	0	3
Wounds 7 viz.:							
Gunshot - -	1	3	2	41.5	0	0	3
Incised - -	1	104	0	0	0	0	1
Lacerated - -	2†	27	0	0	0	0	2
	47		11		5		63

\* One of these cured by amputation, after a long continued effort to save it; but in the end the deformity was so great, that the limb was useless. The injury was originally caused by the patient leaping from the box of a carriage whilst the vehicle was in rapid motion, thus producing a compound fracture of the leg just above the ankle joint, both bones protruding and striking the ground.

† One was a lacerated wound of the cornea.

W. H. GOBRECHT, Resident Surgeon.

## BIBLIOGRAPHICAL NOTICES.

*Observations on certain of the Diseases of Young Children.* By CHARLES D. MEIGS, M. D., &c. &c. 8vo. Philadelphia, Lea & Blanchard.

*A Treatise on the Diseases and Physical Education of Children.* By JOHN EBERLE, M. D., &c. &c. Fourth edition with cuts, and large additions, by THOMAS D. MITCHELL, M. D., &c. &c. Philadelphia, Lippincott & Grambo : 1850.

Professor Meigs has not been idle during the last few years, as his recent publications testify. Cognizant of the vast experience a large practice among children must have afforded him, we were rather disappointed in finding that he confined himself to "*some of the diseases of children*," and *in limine* we must beg leave to differ from the general custom of the day, to disclaim in the preface "any intention to make a systematic work on the subject, seeing that the place is already occupied with numerous valuable books, presenting a complete body of doctrines on children's diseases." Such an announcement cannot excuse any author, nor free him from the necessity of unfolding to his fellow laborers all the results which his abilities and opportunities have enabled him to attain.

The work before us is undoubtedly a valuable addition to the fund of information which has already been treasured up on the subjects in question. It is practical, and therefore eminently adapted to the general practitioner. We regret to find occasionally the same style pervading it, for which our esteemed author has hitherto been censured. He now and then takes liberties with his mother tongue, coining words where he chooses, and anastomosing them with those of other languages whenever it suits his fancy. We regret this careless style the more as he designs his publications chiefly for students; if he be desirous of impressing them with the importance and gravity of the subject he is treating, and with the utility of his instructions, let him recall the advice of the Roman satirist: "*Si vis me flere primo tibi flendum est*;" if he desire to secure the attention of his readers, he must treat his subject with the seriousness and dignity it demands.

Nor any the less objectionable are the theoretical flights in which



our author now and then indulges, the more dangerous because they are so happily expressed.

In attaching a great deal of importance to the physiognomy of the sick child, we consider that Prof. Meigs is calling the attention of medical men to a point too often neglected, and from which they might derive great advantages in their prognosis of the diseases of children, thus confirming Mr. Jadelot's researches on this subject, to whom the profession is deeply indebted for information which had previously remained latent, but we cannot yield our implicit confidence to the author's views upon the voice of the child in crying, although we know that in this opinion he is also sustained by others. It has been beautifully said in reference to the undulatory theory of light, that the eye listens for light as the ear does for sound, but those who give the different aches a voice have certainly the advantage in originality.

Prof. Meigs is down stairs, hears a child cry, and by a species of mysterious knockings upon his own tympanum, instantly recognises from the peculiar tones of the child that it has the earache. He proves the correctness of his views by entering the room, and pressing upon the right ear; the infant only evinces surprise at his rudeness; he repeats the same movement upon the left, when lo! the same dulcet notes are poured forth hence it is the cry of the earache. Here is the key to all aches, so that every organ has its peculiar key, and when all become affected, all the stops are pulled out, a glorious diapason is formed, and we have a chorus of aches—"spectatum admissi risum teneatis amici." We prefer the views of Bouchut on this point, who in his recent work, "*Sur les maladies des nouveaux nés*," in the chapter headed "*Du Cri*" thus expresses himself: "*Il n'y a guère qu'une maladie dans laquelle le cri présente des modifications importantes et caractéristiques, je veux parler du croup.*" Again, still further on, "*la durée du cri des enfants n'indique pas autre chose qu'une douleur très vive, sans aucune rapport avec l'affection de tel ou tel autre organe,*" &c.

The first chapter is taken up with some very able remarks in reference to the diagnosis of the diseases of early infancy, the importance of which is forcibly dwelt upon; some of the diseases of uterine life, the non-viability of the child, the causes of children being born in an asphyxiated condition, and the treatment to be pursued under such circumstances, the formation of the navel, and

lastly the retention of the meconium from inertia of the bowels or imperforate anus. Although these points are in the main well treated, still we regret their conciseness, and we would have wished our author to have drawn more upon his vast fund of experience and observation, and given us some chapters upon the physical training, and hygienic treatment of new born children.

We skip over the chapters on bloody tumors of the scalp, and inflammation of the eyes and mouth, as they require no particular remark.

Chapter 4th has for its subject Coryza. Dr. Meigs holds the opinion "that the nares are the orifices through which the vital air has access to the lungs, and that an instinctive sense teaches the new-born children to use them alone." He attributes the disease entirely to the nares becoming obstructed with a thick inspissated mucus; respiration being thus interfered with, the vitality of all the tissues becomes impaired from want of proper æration of the blood, the functions are interfered with, and emaciation takes place. The author has omitted to state that rapid emaciation very often ensues from the child's inability to suck, the mouth being constantly employed in keeping up the oxygenation of the blood; it is therefore requisite that the child should be fed with the mother's milk, by means of a spoon, since the fruitless efforts to suck aggravate its sufferings, and yet the want of nourishment, tending to augment the vitiation of the tissues, the child may die from inanition.

Dr. Meigs concludes his admirable chapter on this subject by recommending a constant lubrication of the nostrils with some animal oil to prevent the hardening of the mucus viscosities. He also dwells with much earnestness upon the treatment suggested by himself. We copy his own words. "In a very considerable number of cases. I have found the warmth of a flannel cap, worn upon the head, sufficient speedily to cure the malady, and I beg leave to assure the reader that, for the most part, little else is to be done, beyond giving very clear directions as to this method."—We have tried this *eureka*, and regret that we cannot confirm the author's views, having found that it has no advantages superior to those derived from keeping the child in a room of equal temperature, the disease in the majority of cases running its course.

We would call particular attention to the chapter on bowel complaints and early feeding, as containing most valuable suggestions.



It is unfortunately too common a practice to cram the newborn infant with gruel, or molasses and water, the physicians carelessly entrusting their delicate charges to the whims and freaks of officious nurses, whom neither time nor experience can teach, that in this, as in all similar circumstances, we should attend to the indications of nature. The peculiar secretion called colostrum, which issues from the mother's breast, is the repast which nature has destined for the child, and which from its very composition is peculiarly adapted to lubricating the internal surface of the digestive tube, to stimulate its contractions, to dilute the meconium, and consequently to facilitate its expulsion; properties which our learned author does not appear to recognize, judging from the following remarks:—"I know not and believe it is not known, whether any peculiar function or power is connected with the early ingestion of the early milk of the mother, a fluid known to be characterised by the presence of a large quantity of colostrum."

The following chapters treat of infantile jaundice, and of the child's dress. We recommend the attentive perusal of the last named chapter to those practitioners who as servile panderers to the morbid tendencies of the age would trammel the young and delicate infant by the bonds of fashion, regardless of the varieties of climate or the peculiar diathesis of the child.

We have now reached the chapter on Cyanosis Neonatorum, and in approaching this subject we would inform our readers, that we have reached our author's hobby-horse, and as, in the language of Sterne, "a man's hobby-horse is as tender a part as he has about him," we shall carefully endeavor to make no unprovoked strokes.

The first part of this chapter is taken up in considering the foetal circulation; the author then proceeds to prove that, 1st, the nervous mass is the generator and conductor of biotic force, and 2dly, that oxygeniferous blood is indispensable to the evolution of life force. Professor Meigs' remarks on these points are fraught with information of the most practical kind, but we are at a loss to understand how he can consider them as consequent upon his own theory alone of the causes, inasmuch as they can be predicated of that of his opponents. Professor Meigs still maintains his former theory of this disease, viz., "its being entirely due to a persistent opening in the foramen ovale after birth, and an admixture of arterial and venous blood." He also persists in the treatment suggested by himself, of

placing the child upon the right side and thus causing the valve of Botalli to close.

It seems to us that if the discoloration of the skin depends entirely upon the admixture of arterial and venous blood, we should always find in cases where discoloration existed the communication above named. Many cases, however, have been cited in which neither the foramen ovale nor the ventricular septum, was open, nor did there exist any other passage by which the arterial and venous blood could commingle, yet in all these there was the discoloration which is characteristic of cyanosis.

We could go on to prove, 1st, that cyanosis may exist without the admixture of blood; 2d, that there is no proportion between cyanosis and the degree to which the blood is mixed; and 3d, that complete mixture of the blood may take place without cyanosis. We might thus step by step sap the foundation of his whole theory of cyanosis. While upon this point, we would refer our readers to the excellent inaugural essay written on this subject by Moreton Stillé, M. D., of this city, and published in the *American Journal of Medical Sciences* for 1844, whose views have been entirely overlooked by Professor Meigs in all his writings on cyanosis; and yet Dr. Stillé examines the subject so ably and dispassionately, and presents such an array of facts to support his opinions, that we should have supposed they would have commanded the attention of so philosophical a mind as our author's. The result of the observations of Dr. Stillé prove, we think, most conclusively that congestion of the venous system, resulting from some obstruction in the right side of the heart, or in the pulmonary artery, impeding the return of the blood to the lungs, affords the best method of explaining cyanosis; and that if contraction of the pulmonary artery be taken as the type of all the lesions which may produce cyanosis, we are entitled to state, 1st, That it is present in every case of cyanosis. 2d. That it never exists without the concurrence of cyanosis. 3d. That it is an adequate explanation of the most important phenomena of the disease.

As for Dr. Meigs' proposed plan of treatment, and the great success which he says has attended it, we think that we cannot do better than copy the remarks of Mr. Norman Chevis upon this point, who, in an able article, published in the *London Medical Gazette* of March, 1847, after having announced that his own investigations are almost confirmatory of Dr. Stillé's inferences, uses the



following language in respect to Dr. Meigs' plan of treatment. "Successful as this application of Dr. Meigs' theory may have proved, it is certain that his explanation of the fact is by no means demonstrative. So far from the patency of the foramen ovale being an essential concomitant of blue disease, it is well known that in a very considerable proportion of instances of cyanosis, the auricular septum is perfectly closed." . . . . . Further on he adds, "The position of the body recommended by Dr. Meigs, is, however, well calculated to relieve the paroxysms from which subjects of congenital heart disease suffer, as it places nearly the whole of the voluntary muscles in a state of relaxation, thereby rendering the circulation through the extreme vessels as free as possible, and, (what is of more importance) as it facilitates the supply of arterial blood to the lungs, and to the brain." It is not, therefore, essential to the success of Dr. Meigs' treatment, that his views of the cause of the disease should be correct.

The chapter on Croup is an able exposition of the most recent views of the disease; and the great success which the author has had in this disease, should secure the greatest confidence in his statements.

The opinion that croup, though an inflammatory disease, is not without a very evident spasmodic element, is, we think, a most judicious one; and many practitioners in treating this disease shipwreck on this point, some entirely excluding the inflammatory, others the spasmodic. The following paragraph will, therefore, be read with interest:

"It is quite true that in spasmodic croup, or spasmodic laryngitis, it often happens that although the patient may have been suddenly attacked, and almost as suddenly relieved, he is notwithstanding left for some time after the relief, affected with signs of an altered condition of the windpipe; that is to say, he will be a little hoarse; and upon any attempts at rapid, or sudden aspiration, he will find that the croup sound is still there; as is the case also in the act of coughing, and this though, in any ordinary state of breathing, not the least sign of difficulty can be perceived. This seems to me to show, that what is called spasmodic croup, is not merely spasm, but there is a substratum of congestive, or inflammatory, disorder, which ought not to be lost sight of by the medical attendant," &c.

Dr. Meigs is a strong advocate for the lancet in this disease, and very justly observes, "a vast number of cases yield readily to a treatment without venesection. I advocate the precept to remember, always, that the lancet affords the surest guaranty of success and safety." Our own experience confirms the author's views, and we could relate numerous instances in which the attack was cut short by a prompt application of the lancet.

Dr. Meigs extols the use of the alum emetic, and we think with great propriety, for in our hands it has proved one of the most useful remedies in removing the inspissated mucus from the fauces and larynx, and at the same time it is so much more harmless than the domestic remedy, Coxe's hive syrup, a preparation, from the indiscriminate use of which, we have seen many untoward symptoms arise. We have for some time entertained the opinion that this was entirely too powerful a remedy to be entrusted in the hands of a mother or nurse, and administered at their discretion. It is undoubtedly accumulative in its effects, and we have the records of several cases in which inflammation of the gastro-intestinal mucous membrane supervened upon its use. We therefore deem it a duty to enter a caveat against our author's recommendation of it as a domestic remedy; the alum has in our hands been quite as efficient.

The observations upon tracheotomy as an ultima ratio in croup, are sound and liberal, and contrast well with the croakings and anathemas of some of our medical men against this brilliant triumph of surgery.

We ourselves could add the authority of a recent case of tracheotomy performed by the same eminent surgeon, Prof. Pancoast, in which the result was as gratifying as that of young Repplier's; there is one point, however, in the treatment of tracheotomy which our author seems to have overlooked, and yet one we deem of vital interest, we refer to the introducing into the trachea, after the operation, a solution of nitrate of silver, sixty grs. to the ounce of water. This solution should be dropped by means of a quill used as a *tête liqueur*, having found in our experience that the impetus with which the stream issues from the syringe, causes the trachea immediately to reject the fluid, whereas, by gradual instillation a great deal oozes down.

The chapter on pertussis is extremely interesting and practical;



the origin of the disease is attributed entirely to a morbid condition of the medulla oblongata, unattended with any disease of the lungs or pharynx. The following is very much to the point:]

"I have already said that I look upon ordinary whooping cough, as a mere fit of coughing, which is peculiar not only by the long inspirations and the succession of incomplete expirations, and by the whoop, but also by the periodicity. And I repeat that if the patient have only the whooping cough, I generally leave him to nature for the cure, preferring to entrust him rather to her power than to the questionable conservatism of any therapeutics whatever."

The following remarks upon the condition of the stomach are of great utility.

"It is expedient in cases of pertussis to regulate the diet of the patient. An over rich and stimulating diet tends to develop the the gastric and circulatory complications of the malady in a positive manner," &c.

The chapter on laryngismus stridulus is in our opinion one of the most interesting in the book. The origin of this affection is seated by the author in the brain and diaphragm, especially the latter, and hence he proposes the name Phrenismus, as more properly indicating the real seat of the disease. Considering that the attacks by suspending the æration of the blood, vitiate the blood so as to render it either unfit for the nervous mass or even poisonous to it, Prof. Meigs very properly recommends us to cut short the attack, especially the primary attack, as rapidly as possible, "by applying a lump of ice wrapped in a handkerchief or napkin, to be applied to the epigastrium, and moved over the arch of the hypogastrium."

The author finishes his judicious treatment of the disease by the following recapitulations which on account of their soundness and usefulness we will give in full.

"In fine I believe our duty in the case consists—

1st. In making a correct diagnosis.

2d. In presenting proper explanations to the friends as to the prognosis, which is often unfavorable.

3d. In obviating the provoking causes, as swollen and distended gums, which are to be relieved by cutting them.

4th. In directions as to diet, dress, exposure, and all that concerns the hygiene of the case.

5th. In the use of counter-irritants and anti-spasmodics in the exhibition of tonics, and in attempts to defeat the demonstration of the attack by great quietude, and by applying cold to the region of the diaphragm; and lastly, in conducting the paroxysm, when formed, to the earliest and least mischievous possible conclusion, by the warm bath, and other measures."

We have now reached the last chapter in the book, in which the author treats of scarlet fever.

He first sets out with the announcement of his opinion "that scarlet fever is a non-contagious disease, whose cause is to be sought for in some intemperies of the air, or epidemic principle, of whose intimate nature I am wholly ignorant." The next question discussed is the nature of scarlet fever, which our author considers an inflammation of the true blood vessels or endangium, the inflammation being observable chiefly in the capillaries of the skin, mouth, throat and nostrils. In some cases the inflammatory affection seizes upon the capillaries of the brain, and more rarely upon those of the stomach and bowels. The author says:

"Seeing that the skin is an organ of vast extent, exceedingly vascular, and possessing important relations with the rest of the economy, we feel no surprise to observe the constitutional disorder produced by so extensive an inflammation as that of the whole derm. As the crisis of the blood depends upon the healthful force of the endangium, it is to be expected that extensive and violent disorders of the endangium shall produce great changes in the blood, and that these influences will exercise a pernicious influence throughout the economy. The nervous force, dependent as it is on the power of the blood to be charged with oxygen, fails under such conditions of the vital fluid, and the organs and functions in succession become overthrown."

Dr. Meigs considers that the different varieties of scarlet fever, result entirely from the peculiar set of capillaries affected: thus in scarlatina simplex, the capillaries of the skin are solely affected, in scarlatina anginosa those of the skin and of the mucous membrane of the fauces; in scarlatina maligna, the capillary endangium of the skin, fauces, Schneiderian membrane, tongue, parotids, heart, lungs, stomach or encephalon are all involved.

The author's pathology, however ingenious and interesting it may be, lacks certain links, without which his deductions are im-



perfect. In the first place it is by no means conceded that the endangium either makes the blood by transmitting to its elements the nervous force, or maintains the blood in a living state, by its presence and contact. 2d. Proofs are still wanting, that positive inflammation of any part of the lining membrane of the capillaries exists in this disease. The morbid appearances upon dissection of fatal cases of scarlet fever are by no means uniform, and Dr. Tweedie states that he has frequently been surprised on examining rapidly fatal cases, to find no morbid appearances that could explain the cause of death.

Dr. Meigs' remarks upon the treatment of the disease, are fraught with practical instruction. In treating the sick, says the author, we ought always conscientiously to avoid the administration of drugs and medicines, in the cases where we have no call for them." The practice of the present day, is unfortunately sadly at variance with this salutary caveat. "*Melius anceps remedium quam nullum*," is the cry which assails us on all sides. Masterly inactivity is as sedulously eschewed in the sick room as in the legislative halls, and the progressiveness of the age requires all the thunders of the materia medica to be hurled against the aggression of the disease, in whose ruins the mangled remains of the vis medicatrix naturæ may sometimes be discovered.

Dr. Meigs' experience is in favor of venesection in strong and plethoric subjects, where the fever is high. Affusion of the body with cold water is highly extolled by him, but we think that the sponging of the body is preferable to the method pointed out by the author. We were anxious to discover what views Dr. Meigs entertained, as regards the administration in this disease of any of the mercurial preparations. We have invariably found their employment attended with ill results, and have for some time sedulously avoided them. We should be glad to have the opinion of such experienced men as our author, upon this subject. Too much stress cannot be laid upon the author's instructions to keep the fauces and nostrils clear, not only in reference to the comfort of the child, but also with the view of preventing a vitiation of the blood from partial asphyxia.

We regret that our limits will not allow us to follow Professor Meigs any further, for although there is much in the pathology of this work which is fanciful and at variance with recent investiga-

tions, and we have not hesitated to designate those points in which we deemed the author to err, still we would remind our readers that stones are only thrown at those trees which are laden with fruit; the spots in the sun must be carefully mapped out and numbered, to be known; but the light and heat of the great luminary require no herald and no chronicler. Dr. Meigs' works have the same fascination which belongs to himself; his style is bold, fanciful and ingenious; he writes *curente calamo*, his thoughts trickling down from his brain to his pen; and though he sometimes forgets the sage precept, "*sæpe stylum veritas*," still, considering his constant occupation, and the immense toils which he undergoes, we are amazed that he can accomplish all that he does. Long may he be spared to grace the profession with his rare abilities.

We shall look forward for another volume from him, when, having retired from the toils and anxieties of one of the largest practices ever enjoyed by a medical man, in the shade of a mellow age, he can reveal to us more calmly, more dispassionately, and with more justice to himself, those mysteries which the labors of years have disclosed to him, years spent in unceasingly ministering to the sufferer, and in the practice of the most ennobling virtues.

We regret that the space occupied in noticing Professor Meigs' work, prevents us from dwelling at length upon the second which heads our remarks.

Dr. Mitchell's work is a reprint of Dr. Eberle's upon children, to which he has added a large appendix. We refrain from making any comments upon Dr. Eberle's part, inasmuch as it belongs to the past, and the profession have already pronounced judgment upon it.

We differ from Dr. Mitchell in our views, as regards the utility of bringing out another edition of Eberle, at a moment when we are flush in works in all languages upon the diseases of children, works combining in them all the experience of the past with the results of modern investigation. We admit that the importance of this branch of medical science demands the deepest attention, and exacts from us a most intimate acquaintance with every author that can shed any light upon so obscure a subject; and yet we think that the profusion which now exists is disadvantageous to the student and practitioner, placing them in the same category with the child cited by J. G. Rousseau, who, gathering shells by the seaside,



begins at once by picking up an ample supply, and then desirous of securing all those which strike his eye as he moves onward, he alternately selects and rejects, until finally weary, overwhelmed by the number and hesitating which to choose, he ends by throwing all away, and returns home empty handed.

Dr. Mitchell's sequel contains a fair and concise exposition of some of the diseases of childhood. As we have not noticed anything original in the author's views, and finding that they are generally a fair summary of the opinions of the majority of writers upon the same points, we shall not pause to make any remarks. We would merely call particular attention to the chapters on "Infantile Mortality," and "Diseases acquired and inherited;" they are very interesting, and are entitled to serious consideration.

The author has a queer fancy for commingling Latin and English in his prescriptions, as we observed before in our notice of his work on Therapeutics; it would be far preferable to adopt one or the other. A hasty examination of Dr. Mitchell's work has led us to believe that it embodies all that is important and useful on the subject, and may therefore be safely consulted as a text book; but as it has not added materially to our previous information on the subject, we are forced to exclaim *cui bono!* If an author is not going to add to our previous store, if he cannot give us the results of his own daily observations and midnight watchings, in fine, if he have no original communication to offer, as we are strong in books, we beg "in mercy spare."

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*"A brief history of an existing controversy on the subject of Assimilated Rank in the Navy of the United States. By W. S. W. R. Philadelphia, C. Sherman, Printer, 1850.*

This pamphlet, as its title imports, is a summary and exposition of several publications which have lately appeared in this city and elsewhere, on the question of apportioning rank, *so far as it relates to official etiquette*, throughout the naval service; a subject, strange to say, hitherto undetermined by Congressional enactment.

If the author really considers the pamphlet "brief," his facility in the labors of composition and penmanship are greatly to be envied; but any one who will take the trouble to read it carefully

through, will find that it exposes a degree of monomaniacal jealousy and distrust, among a large body of naval officers, which it is not easy to credit, much less explain.

The case stands thus. The Post Captains, Commanders and Lieutenants of the Navy wish to exclude the Surgeons and Purser from all the ceremonial honors which (*apart from command, be it understood*) define and secure military rank. So entirely hostile is the spirit of this republican government to all such exclusive organizations of mere arbitrary, irrelevant power against scholastic furniture and financial responsibility, that the time has arrived when these gentlemen have become doubtful and anxious about the fairness and stability of these, their ancient usages, and are endeavoring to perpetuate their absurd claims by narrow and illogical appeals to the Navy Department and Congress.

Their first argument is based upon what they consider the merits of inviolate custom, and, with this huge, two-handed sword, they expect to ward off the ameliorating statutes of a higher civilization. Alas for ancient usage! how unceremoniously has the lash been taken from their grasp, and how significantly has the slumbering genius of their better nature been invoked to find some means of rule less repugnant to their sober selves—less shame-effacing to their brother sailor!

The further argument of these gentlemen is, that Surgeons and Purser wish to command them. How utterly preposterous and untrue this is, every naval officer, blessed with a mind and unscathed by a reckless dissipation, must be brought to admit. It is *assimilated and not executive rank* that Surgeons and Purser ask for. So far from having a thought of command, *they repudiate the idea in its any and every sense*. Their education, their habits, their occupations are all at variance with such an exercise of their human faculties. *Their aspirations are infinitely above it*: it would be incompatible, uncongenial, irrelevant. The mission of the one is to the sick and suffering—the ever various duties of the other demand the closest official fidelity. Where are the qualifications for *command* here? Where is the Surgeon who would willingly disparage the high honor of his art by the exercise of mere military authority? Where the Purser who would care to confound his calculations by the petty vexations of command? No:



all *that* is left where it belongs. Let these combatant gentlemen carry their shipmates safely into port, and triumphantly through battle, and they, in return, will confine themselves strictly to *their* professions, and, in so doing, practically refute all such imputations.

This subject invites reference to another pamphlet, recently addressed to the Hon. Secretary of the Navy, and signed by twenty-four post captains, forty-two commanders, and seventy-six lieutenants. Is this the great gun of these gentlemen—the Peace Maker? Let us examine it. Upon looking over this formidable party list, we find that some, probably many, put their names to it, either without being at all aware of the character of the document they were called on to sign, or else because it was said to them—“These doctors and pursers wish to deprive you of command, and nothing but wide concert and extreme measures can defeat their ambitious designs.” This is made apparent by the fact that some of these gentlemen have privately expressed their opinion in favor of the justice and expediency of assigning assimilated rank to Surgeons and Pursers, so that the only question remaining with them would seem to be regarding the precise definition of that rank. Then how strangely and mischievously have they contradicted themselves on the title page of this pamphlet, which aims at the total defeat, without qualification, of all assimilated rank with their brother officers! The title runs thus—“Assimilated Rank: its injurious operation upon the discipline, harmony, and general good of the naval service.” We beg leave to ask, who is injuring the “discipline and harmony of the service,” when these gentlemen pronounce a regulation of the Hon. Secretary’s illegal, and refuse to obey it? Who is impairing the discipline and harmony of the service, when post captains and others indignantly address the navy department, and ask permission to lay aside epaulets, because Surgeons and Pursers have been directed to wear them? Who is destroying the discipline and harmony of the service when officers, commanding on foreign stations, refuse to enforce the general orders transmitted to them, because they conflict with usage and prejudice? The answer is plain: the example of insubordination is set by *superiors* to every stripling in the service.

When an order, issued by the Secretary of the Navy to medical officers in 1848, directing them to inspect, from time to time, the

provisions, water, spirits, and general condition of the ship in which they might be serving, with reference to their salubrity, reached a commander in the Gulf of Mexico, (his name is found in the list above enumerated,) he said to the first lieutenant, "If we are not very careful these doctors will take the command from us soon." Are not these the infirm suspicions of derangement? Is a commander in such a frame of mind likely to sustain the "discipline and harmony of the service?"

The following paragraph may well be transcribed here for its pertinence.

"The last number of the London Medical Times, in an article on the reappearance of the scurvy, and alluding to its having been on board the Raritan, Potomac, and Falmouth while operating in the Gulf, says, 'the American nation should demand the dismissal of the medical staff connected with our naval service.'"—*New York Morning Express*.

How, it may be asked, is our naval service, but more especially the medical profession of this country, to escape the odium of such imputations, when the most ordinary prophylactic measures are defeated by the vigilant jealousies of executive officers?

Are not these gentlemen fighting against an apparition conjured by themselves? We repeat, *It is not executive, but assimilated rank* that Surgeons and Pursers desire, and their opponents *know it*. They do not wish to be indebted for the uncertain substitute of "courtesy" so patronisingly offered to them, a species of alms which is ever found to be somewhat barometrical in its range. If these combatant gentlemen fear innovation, if they fear the weakening of their long and ably exercised military authority, is language so meagre that it will be difficult to frame an enactment which shall preclude all danger of such a consequence?

A word in regard to a certain pamphlet entitled—"A few thoughts upon Rank in the Navy." There is little reason to doubt that it was written outside of the service, for, to the honor of the naval service be it still said, that it were not easy to find an individual in it, with sufficient wit and malevolence combined, to produce such a tirade of sophistry and ill nature. Is it a saving clause, however, that these gentlemen have obtained and published it for unjust party purposes?

We sometimes hear Surgeons and Pursers called non-combatants,



in depreciation of their claims to equal honors with their brother officers. The annals of the British naval service will show that they have never failed to distinguish themselves whenever the opportunity offered, and any one who cares to enquire, will find that, in our own naval service, the elder Hamilton and the late Purser Breese were distinguished and complimented for their personal intrepidity on Lake Erie. And, were it possible, how gladly would the Surgeon turn from his soul-harrowing occupation below, to avenge the sufferings of his mutilated, dying shipmates.

We have reached the application of this subject. Society generally makes a correct estimate of the relative value of the services of its members. Let these gentlemen open their eyes in time. They have complained, ere now, that Surgeons and Pursers are overpaid. But Surgeons and Pursers will yet attain to *all* they merit, abstractedly and *socially*; and, after all, the sick pillow can but be softer for the *cordial* sympathy of the medical attendant whose mere prescription is not all that is required on ship-board; and the heart can only be lighter under many difficulties for the *friendly advances* of the paymaster.

Much more might be said, but we refrain. A board composed of three post captains, *who are known to be inimical to the establishment of assimilated rank*, has been ordered to convene for the purpose of determining the merits of this question, and to confer with an army board detailed for a like purpose. We conjure these gentlemen, then, to act wisely, and to recommend a definite scale of assimilated rank, based upon just principles; for as surely as they fail to do so, Congress will mend their work.

## THE MEDICAL EXAMINER.

PHILADELPHIA, NOVEMBER, 1850.

## SOUTHERN MEDICAL STUDENTS.

"We are sorry to find in a Southern religious paper the following article, so unjust to the North, and so prejudicial to that kindly feeling which has heretofore been perpetuated between the northern and southern colleges, and it is believed, to the advantage of both. The writer is eulogizing one of the southern medical colleges, earnestly and no doubt justly lauding its Faculty, which all seems proper and right. But is it necessary for the prosperity of any southern school, that so unfounded a statement should be put forth, as that which here alleges that 'in Philadelphia and New York, southern students are uniformly held in the utmost contempt,' and subjected to 'brutal treatment;' and hence urges upon such the duty of deserting northern schools?"

There are scattered through the south many thousands of physicians, who were themselves professionally educated at the north, either in the schools of Philadelphia or New York, and whose pupils have annually been sent hither; upon whom the duty would seem to devolve, to repel these unheard of accusations, by testifying what was their reception and treatment from the 'Northerners' in these cities. It does seem to us that at the present crisis, when conciliation and compromise between citizens of our common country, is encouraging the hope of a better feeling both in the north and south, the introduction of so offensive an article, in relation to our medical colleges, into any public journal, is singularly unfortunate.

On behalf of Philadelphia, as well as New York, we utterly deny that there is any foundation for the allegations made here against the Northerners; or for the prejudices here sought to be created against any of the medical colleges in this region. Nor can we believe that medical students from the south can be deterred from coming hither, by reason of such accusations made by an anonymous writer, without any semblance of evidence, or any attempt at proof.

We honour the laudable and successful efforts of our professional brethren in the southern section of our country, to found and sustain medical colleges, and other southern institutions of learning, so that they may no longer be dependent on the north, as they formerly were, to some extent and for obvious reasons. And when they shall be able to present facilities for the pursuit and cultivation of medical science, and clinical attractions to students, at any of these colleges, surpassing those so long existing at Philadelphia and New York, southern students will not be slow in estimating their claims, and awarding their preference to those teachers and schools which excel; and this without reference to their geographical position. Let our friends in Virginia make a greater



and better medical school than we have here, and northern as well as southern students will flock thither. But until they do this, they should have higher reasons than 'abolition encroachments from the north and east,' to offer as inducements in favor of 'southern institutions;' and should not draw on their imagination for their facts by creating prejudices, as ungenerous as they are untrue, against their northern brethren.

'It is probable, that the reaction which must soon take place in favor of southern institutions generally, against the north and east, in repelling their abolition encroachments, will influence the prosperity of this excellent School. It is a matter of astonishment, that southern students should continue to throng northern medical schools, especially those of Philadelphia and New York, when they are *uniformly held by Northerners in the utmost contempt*; and when, too, they have experienced so many acts of unkindness, not to say *brutal treatment* at their hands. Southern students seldom ever receive their due measure of justice from the civil authorities of Philadelphia, should they chance to become embroiled with the citizens of that place. It is not unusual for a southern student, in such cases, to be held to bail, while the Philadelphians are exempted, and generally, too, when they are the aggressors. It is high time that southern students should resent such indignities, and this they can effectually do by deserting their schools, and patronizing southern institutions, which, generally, are little inferior to them in the means of instruction; and fully their equals, if not their superiors, in point of talent and ability of their professors.'—*R. C. Advocate*.

We have extracted the above from the New York Medical Gazette, to the Editor of which our thanks are due for his defence of Philadelphia. We are sure that all he says of New York is true, and we *know* that in this city, students from all sections are uniformly treated with kindness by all. That they do occasionally become embroiled with the citizens is doubtless true; but that they receive full justice, and even indulgence from the authorities, the following letter from the Attorney General of the Commonwealth will show.

*Philadelphia, Oct. 22d, 1850.*

DEAR SIR,

There is not the slightest foundation for the idea that Southern medical students are, or ever have been, unjustly, or even unkindly, treated by the authorities of Philadelphia. For more than two years have conducted the public business, as prosecuting officer for this City and County, and have of course had full opportunities of observation. Nothing of the kind has occurred; so far from it, that in a few instances within my recent recollection, there has been a strong disposition to look mercifully on outbreaks of irregular and excited young men. The Professors in our colleges here, many of them being Southern gentlemen by birth and early association, have always been ready to enter bail for those young gentlemen who get themselves into trouble, and discredit their respectable families at a distance; and here the matter usually drops. I am happy to say that, within the last few years, there

has been a great improvement in the demeanor of medical students from abroad. They are generally very respectable and decorous young men, are cordially welcomed, and kindly and justly treated when they come and whilst they stay amongst us.

I hope you will peremptorily contradict this absurd story.

Truly yours,

WILLIAM B. REED.

DR. F. G. SMITH.

We have often said with pride, of medical students, that we did not believe that an equal number of young men of any other profession could be assembled, against whom so few causes of complaint could be urged. We do them no more than justice in bearing this witness, and to them we look for the refutation of the charges that have been so ungenerously urged against New York and Philadelphia.

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SOUTHERN MEDICAL AND SURGICAL JOURNAL.

Owing to a temporary derangement in the printing office of the Medical Examiner, by which we were prevented from seeing all the proofs, we failed to give credit to our esteemed cotemporary, for the excellent article on the Renal Circulation by M. Bernard, communicated to the Southern Medical and Surgical Journal, by Dr. Harris, and which appeared in our Record of Medical Science in the September number. It was entirely accidental.

We wish that those who copy from the "Examiner" would also "render unto Cæsar the things that are Cæsar's."

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DR. E. N. HORSFORD has been appointed Professor of Chemistry in Massachusetts Medical College, in place of Dr. Webster.

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DR. SAMUEL JACKSON, late of Northumberland, has been appointed one of the physicians to St. Joseph's Hospital, in place of Professor Jackson, resigned.

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DR. ALFRED STILLÉ of Philadelphia, has gone to Europe in consequence of impaired health. He carries with him the sincere wishes of many friends for his speedy restoration.



*Deaths in Philadelphia from Sept. 21st to Oct. 19th, 1850. Reported by Mr. JAMES AITKEN MEIGS, Student of Medicine.*

Diseases.	Ad'ts	Chil.	Diseases.	Ad'ts	Chil.
Abscess, . . . . .	1	0	Fever, puerperal, . . . . .	3	0
“ of lungs, . . . . .	1	1	“ remittent, . . . . .	6	0
“ of perineum, . . . . .	0	1	“ scarlet, . . . . .	0	10
Apoplexy, . . . . .	7	0	“ typhoid, . . . . .	12	4
Asthma, . . . . .	1	0	“ typhus, . . . . .	9	1
Burns, . . . . .	2	1	Fistula, . . . . .	1	0
Cancer of face, . . . . .	1	0	Fracture, . . . . .	1	0
“ stomach, . . . . .	2	0	“ of leg, . . . . .	1	0
“ uterus, . . . . .	1	0	“ skull, . . . . .	0	1
Carditis, . . . . .	0	1	Gangrænosis, . . . . .	0	1
Casualties, . . . . .	5	3	Gangrene of intestines, . . . . .	0	1
Cholera infantum, . . . . .	0	11	Hæmoptysis, . . . . .	1	0
“ morbus, . . . . .	1	0	Hæmorrhage . . . . .	1	0
Congestion of brain, . . . . .	5	3	“ uterine, . . . . .	1	0
“ liver, . . . . .	0	1	Hernia, strangulated, . . . . .	1	0
“ lungs, . . . . .	3	2	Inflammation of brain, . . . . .	2	7
Convulsions, . . . . .	1	33	“ breast, . . . . .	0	3
“ puerperal, . . . . .	0	1	“ bronchi, . . . . .	2	12
Croup, . . . . .	0	6	“ liver, . . . . .	1	3
Cyanosis, . . . . .	0	2	“ lungs, . . . . .	8	7
Debility, general, . . . . .	9	12	“ parotid gland, . . . . .	0	1
Diabetes, . . . . .	1	0	“ peritoneum, . . . . .	3	4
Diarrhœa, . . . . .	5	10	“ pleura, . . . . .	1	0
Disease of brain, . . . . .	2	0	“ stom. & bowels, . . . . .	11	5
“ heart, . . . . .	6	1	Inanition, . . . . .	1	3
“ kidneys, . . . . .	2	0	Intemperance, . . . . .	2	0
“ liver, . . . . .	2	0	Intussusception, . . . . .	2	0
“ lungs, . . . . .	1	2	Jaundice, . . . . .	0	1
“ spine, . . . . .	0	1	Malænia, . . . . .	1	0
“ stomach and bowels, . . . . .	2	1	Malformation, . . . . .	0	4
Dropsy, . . . . .	8	1	Mania-a-potu, . . . . .	9	0
“ abdominal, . . . . .	3	1	Marasmus, . . . . .	2	23
“ of breast, . . . . .	2	1	Measles, . . . . .	0	1
“ of head, . . . . .	0	13	Mortification, . . . . .	1	0
Drowned, . . . . .	3	2	Œdema glottidis, . . . . .	1	0
Dysentery, . . . . .	26	16	Old age, . . . . .	17	0
Effusion on brain, . . . . .	1	5	Palsy, . . . . .	4	0
“ lungs, . . . . .	1	0	Perforation of stomach, . . . . .	1	0
Emphysema, pulmonary, . . . . .	1	0	Pertussis, . . . . .	0	9
Enlargement of liver, . . . . .	1	0	Phthisis pulmonalis, . . . . .	66	2
Epilepsy, . . . . .	1	0	Poisoning, . . . . .	0	1
Erysipelas, . . . . .	2	2	Scirrhus, . . . . .	1	0
Exhaustion, . . . . .	1	0	“ of stom. and liver, . . . . .	1	0
Fever, . . . . .	0	1	Softening of heart, . . . . .	1	0
“ bilious, . . . . .	3	1	“ spinal marrow, . . . . .	1	0
“ cerebral, . . . . .	1	0	“ stomach, . . . . .	0	1
“ congestive, . . . . .	3	1	Spina bifida, . . . . .	0	1
“ hectic, . . . . .	0	1	Still born, . . . . .	0	32
“ intermittent, . . . . .	1	0	Tabes mesenterica, . . . . .	0	2

Diseases.	Ad'ts	Chil.	Diseases.	Ad'ts	Chil.
Teething, . . . .	0	1	Ulceration of throat, . . . .	1	0
Tetanus, . . . .	1	1	Unknown, . . . .	2	2
Tuberculosis, . . . .	0	1	Varicella, . . . .	2	1
Ulceration of small intest. . . .	1	1	Violence, . . . .	1	0
				303	291
Total, . . . . .				594	

Of the foregoing the ages were as follows:—

Under 1 year,	-	-	-	146
From 1 to 2,	-	-	-	62
2 to 5,	-	-	-	40
5 to 10,	-	-	-	24
10 to 15,	-	-	-	7
15 to 20,	-	-	-	12
20 to 30,	-	-	-	67
30 to 40,	-	-	-	74
40 to 50,	-	-	-	56
50 to 60,	-	-	-	41
60 to 70,	-	-	-	29
70 to 80,	-	-	-	20
80 to 90,	-	-	-	13
90 to 100,	-	-	-	3
				594

Included in this number, are 56 from the Almshouse, 20 from the surrounding country, and 38 people of color.

## RECORD OF MEDICAL SCIENCE.

### ANATOMY AND PHYSIOLOGY.

*A Retrospect of the progress of Microscopic Investigation, and of the more important recent Contributions to Normal and Pathological Histology.* BY ROBERT D. LYONS, M. B., T. C. D., L. R. C. S. I. *Ex-clinical Assistant to the Meath Hospital, one of the Surgeons to the Anglesey Dispensary, Lecturer and demonstrator of Anatomy in the original School of Medicine, and Honorary Professor of Anatomy to the Royal Dublin Society.*

Of the several methods of investigation by which, during this, the first half of the nineteenth century, the science of medicine has been advanced, and so many important additions have been made to our knowledge as well of normal structure and function, as of the several lesions which are produced in both by disease, not one is entitled to more



serious attention at the hands of the physiologist, the pathologist, and the practical physician, than that which reveals to us, by the aid of the microscope, the ultimate configuration and arrangement of the particles of the most complex tissue, and resolves into elements the most dissimilar what to the naked eye appears a homogeneous fluid.

While we acknowledge the deep debt of obligation which our science owes to the researches of the chemist, and fully appreciate the value of his labors, we cannot but think that the extensive and vigorous prosecution of microscopic investigation is destined to confer equally signal benefits on medicine. A retrospective glance at what has been already achieved in this department would appear sufficient to convince even the most sceptical; but it is to be regretted that an irrational conservatism, and opposition to what is new, with a profound veneration for all that the past has transmitted to us, are too often active and watchful to throw a barrier of hostile prejudice in the way of those who are bold enough to break new ground. We find that, even on the Continent, very recent writers have thought it necessary to enter at some length into the consideration of the claims which the microscope has on our attention, though neither amongst our French nor German neighbors can its application to scientific medical investigation be considered as new (*a.*)

And yet, if we are to believe in a gradual progress towards the perfection of our art, the new must be ever looked for, and its advent should be hailed with gladness; not, however, that it may supersede the old, as proclaimed by many of its too zealous advocates with an exaggerating enthusiasm, perhaps never wholly separable from the introduction of a new dogma; but that with new aids superadded to the means we are already in possession of, we may be the better able to undertake the investigation and solution of difficulties that have hitherto baffled our best energies. And who is there so confident in the powers of his art, that will venture to assert that it needs no amelioration, that it has reached its point of culmination? If there be such, let him reflect on the many occasions that the most scientific principles of diagnosis have failed to detect an existing lesion, that the most judiciously directed treatment has been unsuccessful; let him but look on the long category of nervous diseases, and sum up the amount of his knowledge of their causation and their pathology, or the value of his skill in their treatment.

Though our preface be apologetic, it can hardly be deemed superfluous, especially in the pages of an Irish periodical, issued from the Irish school where every department of medicine is represented, and cultivated with success, save one, and that one, as we firmly believe, destined to

(*a.*) *Traite du Microscope, &c.*, par le Dr. Ch. Robin. 8vo. Paris, 1849, pp. 79, *et seq* The following passage is deserving of attention:—

“Il n’y a, comme on le voit, dans tout ce qui précède, rien de plus que ce que nous étudions dans les autres corps, ce sont les mêmes caractères, les mêmes propriétés; il n’y a de nouveau que le manière des les observer, qui n’est elle même qu’une modification de nos moyens ordinaires d’observation appropriées à leur petit volume.

exercise a powerful influence on our views of the most abstract as well as the most practical questions. We believe that we are justified in saying that no original communication of any importance has been made to histology, or any collateral branch of microscopic investigation, by an observer from the Irish school; though, as we are fully aware, many of our physicians and surgeons have occupied themselves in verifying the observations of others, and in no few instances have acquired practical skill in the employment of this instrument, and made useful applications of the results thus obtained in the practice of their profession (*a.*) It may, however, be anticipated, that before long the attention of the Irish school will be fully awakened to the importance of the subject, and that many will be found amongst us ready and willing to engage in this interesting department of medical investigation. Our object in the present retrospect has been as much to bring the subject prominently forward, as to give a succinct though brief account of some of the more remarkable contributions to histology, which have been recently made in the English and Continental schools. The limited space which can be afforded to communications like the present in a journal so fully occupied as this with subjects of a more directly practical nature, prevents us from giving as complete a resumé of the state of microscopical science as we could wish; it is to be hoped, however, that the several contributions to histology that we are about to bring under consideration will be found both interesting and important.

The systematic treatise of Quekett, which was brought under review in a former number of this Journal, enters so fully into the consideration of the mechanical arrangements of the microscope, that we feel it unnecessary to do more at present than refer to its pages such of our readers as may be anxious to learn any particulars of manipulation. A work of somewhat similar scope has been published (*b.*) by M. Chas. Robin, author of the treatise "*Des Végétaux qui croissent sur l'Homme et les Animaux.*"

Though it is no part of our present intention to describe either the microscope itself or any of its accessory apparatus, we shall borrow from the treatise of the latter author some practical hints which may be of value to those who are actually engaged in making investigations. The experience of M. Robin is directly opposed to the opinion maintained by some, that the prosecution of microscopic investigation is injurious to the organs of vision, and he does not hesitate to say, "*Depuis Leuwenhœck, qui conserva d'excellents yeux jusque dans une extrême*

(*a.*) It is well known to most of our readers that the late Dr. John Houston, of this city, occupied himself very assiduously at microscopic investigation. Drs. Carte, Aldridge, Hill, Moore, Steele, Fleming, &c. &c., possess good instruments and are excellent observers. The last-named gentleman made an interesting communication, on the subject of urinary deposits, to the Surgical Society, at its last meeting, and has on many occasions favored us with opportunities of examining the urine in several abnormal conditions.

(*b.*) *Du Microscope et des Injections*, par le Dr. Ch. Robin. 8 vo. Chez J. B. Baillière, à Paris, 1849.



vieillesse, tous ceux qui se sont beaucoup servis du microscope s'accordent sans exception à reconnaître que jamais ils n'ont ressenti le moindre trouble visuel." If we but reflect, as this author remarks further on, that the light of the microscope is, for the low powers, scarcely greater than that of the sky or a lamp, by reason of the small degree of concavity of the reflecting mirror, and that, as we raise the power of the object-glass, the amount and intensity of the light diminish proportionably, we see no reason why the habitual use of the microscope should tend to injure the visual apparatus. At all events, there is no ground for supposing that the eyes would be more liable to injury from this use of them, than from constant reading or writing, which are equally fatiguing occupations.

Amongst the embarrassments which the inexperienced microscopic observer meets with (they have occurred over and over again to the writer,) may be enumerated his mistaking for constituent parts of the object he is investigating, the several flaws, scratches, and innumerable imperfections of the ordinary glass slides, as also the presence of dust and extraneous matter. Occasionally, when the eye is brought very near the eye-glass during a protracted and careful examination, the movement of the lids throws the eye-lashes in front of the pupil, and they assume the appearance of large filaments crossing the field. But a source of error much more likely to escape detection will be found in the so-called *globules and filaments of the eye*, which do not depend on a too strong impression of the retina by the rays of light, as supposed by some, but will be found to exist in both eyes of every individual who looks through the microscope, being subject to certain varieties in different persons. We are indebted to M. Robin (*a.*) for a very satisfactory account of this phenomenon, of which we propose freely to avail ourselves. When we examine the field of the microscope, without placing an object in focus, a mass of small, perfectly round globules, all nearly equal in size, may be observed. They cover all parts of the field, except about a sixth externally, and a space somewhat smaller within. Two or three tortuous very pale filaments are seen a little external to the centre of the mass of the globules, a few of the latter adhering to them. The mass of globules is limited without by a flattened line of filament, somewhat brilliant in the centre, appearing of the size of a demi-millimetre, and either straight or slightly curved. Within it is limited by a filament more brilliant than the preceding, and remarkably flexuous, and folded on itself. *All the globules and filaments move together.* There appear to be two planes of globules, the one nearer to the eye with sharper outline; the other deeper, paler, more distant, and with their borders more undefined. These two planes sometimes move in opposite directions, but only through a small space, and quickly resume their places. They are in constant motion, and may be ascer-

(*a.*) This writer informs us that M. Donné, in his *Cours de Microscopie*, Paris, 1844, in 8vo., has given a very elaborate description of these globules and fibres. See also *Atlas de Cours de Microscopie*, Paris, 1845, in fol. pl. xx. fig. 83.

tained to obey the movements of the head of the observer, remaining stationary when the latter is fixed for an instant with both hands. The filament which limits the mass of globules externally can be brought to the centre of the field, and it may be then seen that there is a certain number of globules placed outside it. The internal tortuous filament can also be removed, and then external to it will be seen one or two other filaments, equally tortuous and brilliant, directed obliquely towards it. The globules are perfectly round, close to each other, and appear about a demi-millimetre in diameter. They present in the centre a brilliant point, surrounded by a dark, well-defined circle, which is itself surrounded by a second and last external concentric ring, as brilliant as the central point. Those of the deeper plane differ only in being less defined, some of them are in contact with, and impinge on one another, so that their dark borders touch. Besides these globules, some persons see others, larger and more transparent, which do not always occupy the same place in the field of vision. The external straight filament is brilliant in the centre, the borders being more obscure and less defined: it appears about one or one and a half millimetres in size, no globules adhere to it, and it is impossible to say whether it is hollow or full. The internal filament differs from the preceding only by its flexuosity, which causes it to occupy more space in breadth but less in length, and makes it more evident when brought to the centre of the field. The filaments placed amongst the globules are much more narrow than the preceding, they are two or three in number, tortuous, and about the length of a quarter of the field. They are not always so readily perceived as the larger ones, their borders being less marked, and less brilliant, at the same time that the globules encircle and appear to adhere to them. These globules are ordinarily disposed in pairs, and in contact one with another, each pair, however, being separated from the next by a certain interval.

It is unquestionably of the highest importance that we should be able to distinguish these little bodies from any part of the object we are examining; and, in general, no difficulty whatever will be experienced in doing so. When we consider that they follow the motions of the head, and are not affected by changing the positions of the glass slides, or by any movements communicated to the stage, we see at once that they must be referred to the eye of the observer. Hence the necessity on the part of the latter, of making himself thoroughly acquainted with their figure, position, and the peculiar modification which they may possibly be subject to in his own person. They have been, and may be, to many a source of painful apprehension and uneasiness, giving rise to the opinion that the organs of vision were threatened with disease. It cannot, therefore, be too generally made known, that the phenomenon is one experienced by all who make examinations with the microscope; that the conditions that produce it are universal; and that there is no reason for fearing that cataract, or amaurosis, will be the reward of patient and protracted microscopic investigation. As to the cause of these *globules and filaments of the eye* being seen under the microscope, much difference of opinion still exists. M. Robin appears to agree with



M. Donné in thinking, that it is in the liquor Morgagni we must look for their real seat; it would appear to us, however, more probable that they are due, as remarked by Wallace, to the filaments and globules which the investigations of Pacini, Treviranus, Hanover, and others, have proved to exist in the retina. We consider it quite possible that the posterior wall of the eye may reflect light, and thus give an image of itself, in the same manner that objects are seen in the bottom of a river through the water; that in fact the eye may perform the triple office of twice transmitting light, bringing it to a focus, and seeing it.

The work of Mr. Quekett contains a very excellent description of several varieties of micrometers, and gives judicious rules for the estimation, by their assistance, of the value of the magnifying powers of the different object-glasses.

The two processes hitherto most frequently in use on the Continent are, according to M. Robin, *the method of the camera lucida and double vision*; which consists in throwing, by means of a camera lucida, the magnified image of an objective micrometer (whose subdivisions are known) on a rule divided into millimetres, placed at the distance of distinct vision. By noting how many millimetres on the latter are covered by each hundredth of a millimetre of the micrometer, the magnifying power is thus found directly. The second process consists in looking with one eye at the subdivisions of an objective micrometer placed under the microscope, while with the other we regard the divisions of a rule or the points of a compass. The images of the two objects, painted separately on each eye, are thus superposed one on the other in the nervous centres; and with a little habit, it may be easily ascertained how many of the subdivisions of the rule are covered by a single division of the magnified micrometer.

Several sources of inaccuracy are stated by M. Robin to exist in both these methods; these he had detailed at length in his work (a); and he has accordingly proposed the following *method by the ocular micrometer*, which appears to answer all requirements, both as to simplicity and accuracy. It consists in employing an ocular micrometer, the superior glass of which magnifies exactly ten times. The micrometer placed in the focus of the superior glass of this ocular is one centimetre or half a centimetre, of which each millimetre is divided into ten parts. These tenths of a millimetre, being magnified ten times, equal each a millimetre, it is consequently a decimetre, or a demi-decimetre, each of whose subdivisions is equal to a millimetre, which is placed permanently in the ocular. Consequently, if an objective micrometer be placed under the microscope and that, in examining with the ocular, each hundredth of a millimetre of the first is magnified so as to cover three divisions of the second, we learn that the microscope magnifies 300 times.

The following method, which is but a slight modification of that proposed by M. Robin, has been adopted by the writer. It presents the advantage of great simplicity, and requires the use of only one micrometer, and with a little practice will enable the young microscopist to

(a) See his *Treatise on the Microscope*, pp. 134, 135, *et seq.*



make himself acquainted with the powers of the several object-glasses and eye-pieces he may chance to possess; a knowledge which it is the more necessary he should be able to procure for himself, as almost all the instruments in use and on sale in this city are unprovided with any scale or registered description of the powers of the several glasses. It will be necessary in all instances to possess an objective or stage micrometer, whose subdivisions are known; with this, an ordinary eye-piece, and one of the circular glass slips used for covering objects, we are in possession of abundant means for estimating the powers of the various object-glasses; and if a little care be used in the manipulation, a very considerable degree of accuracy may be obtained. The circular glass slip may be extemporaneously converted into an ocular micrometer, by marking off on it, from a rule, with a diamond, or a finely pointed pen, any of the smaller subdivisions of an inch. Thus marked, it may be passed into the eye-piece by unscrewing the ocular, and be allowed to rest on the stop or diaphragm; the ocular being now replaced, we proceed to ascertain its power, and the consequently increased dimensions of the divisions of the glass slip, which may be done in the ordinary way, by looking at them with one eye, while the other is thrown on the subdivisions of a rule. These interspaces, being large, are easily compared, and being superposed one on the other, as above described, the magnifying power of the ocular is thus obtained. If the objective micrometer be now brought into focus, we can easily see how many of its subdivisions correspond to one or more of the spaces which we have marked off, and the power of the object-glass is thus readily found.

For low power, and the comparison of tolerably large divisions of the micrometer and the rule, no difficulty will be experienced in ascertaining the magnifying number of a particular object or eye-glass, by the *method of superposition*, or that of looking with one eye through the microscope, and with the other at a rule, and at most only a few trials will be necessary in order to attain very considerable accuracy; but it will be found widely different when we come to deal with high powers and small divisions and hence the value of M. Robin's method, and the modification of it just proposed, in which, though the preliminary step is made by ascertaining the power of the ocular by a method of double vision, another and certainly a more accurate process is employed for estimating the power of the object-glasses, which necessitates the comparison of minute subdivisions, in which, of course, any error would be less likely of detection. As to any source of error which might possibly arise from placing a slip of glass between the ocular and field-glass of the eye-piece, it must be so very trifling as not to deserve any notice. By selecting a glass whose surfaces are neither convex nor concave, but as nearly as possible flat, the amount of deviation will be altogether inconsiderable.

By a reference to the tables given in the works of Robin and Quekett, it will be seen that the number 800 represents the highest magnifying power which has been obtained for the object-glass by Nacet, a distinguished optician of Paris. In this no account is made of the influ-



ence of the eye-glass, which would, of course, add considerably to the power. While with the one-twelfth inch object-glass, and the eye-glass A, manufactured by Ross, of London, a magnifying power of 600 is obtained ; the same object-glass, giving with this maker's eye-glasses B and C, respectively, 870 and 1400, as the magnifying powers.

With powers far lower than these, however, many of the most useful and interesting investigations can be made. "The magnifying powers from 100 to 300," says M. Robin, "serve for studying the bones, the teeth the hairs, the hair-bulbs, and the glandular culs-de-sac, but only in what concerns their grouping in each *acinus*: the study of their epithelium demands higher object-glasses." We think, however, that this author had elsewhere over-estimated the value of the very high powers, and also the facility of recognizing by their aid, and distinguishing the several varieties of abnormal formation: "La prétendue impossibilité de distinguer les globules de pus, des globules blanc du sang des corpuscules du tubercule et une foule d'autres erreurs, tiennent à la même cause (les faibles grossissements)—p. 172.—*Dub. Quar. Jour.*

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*On the Structure of the Membrana Tympani in the Human-Ear.*—Mr. Joseph Toynbee, in a paper read at the Royal Society on the 20th June, describes the Membrana Tympani as consisting of the following layers, quite distinct from each other, both as regards their structure and functions.

1. Epidermis.
2. The proper fibrous layer, composed of
  - a. The lamina of radiating fibres.
  - b. The lamina of circular fibres.
3. Mucous membrane.

One of the principal objects of the paper is to describe the structure and functions of the fibrous laminae. Since the time of Sir Everard Home, who pronounced the layer of radiating fibres to be muscular, anatomists have differed in their views of the nature of the fibrous element of the Membrana Tympani. The lamina of radiating fibres, the outer surface of which is covered by the epidermis, is continuous with the periosteum of the external meatus. With the exception of the uppermost fibres, which, on account of their being somewhat flaccid, have been considered as a separate tissue, under the name of "*membrana flaccida*," the radiate layer is composed of fibres which extend from the circular cartilaginous ring to the malleus, and they interlace in their course. These fibres are from the 4000th to the 5000th part of an inch in breadth.

The lamina of circular fibres consists of fibres, which are firm and strong towards the circumference, but very attenuated towards the centre. These fibres are so attached and arranged, as to form a layer of membrane, which, in a quiescent state is saucer-shaped. The fibres composing the circular are smaller than those of the radiate lamina being from the 6000th to the 10,000th part of an inch in breadth.

The facts that appear to be adverse to the idea of the fibres of either layer being muscular, are:—

1. The absence of distinct nuclei in the fibres.
2. Their great denseness and hardness.

The four laminae forming the *Membrana Tympani* are continuous with the other structures, of which they appear to be mere modifications, and not one is proper to the organ.

The tensor tympani ligament, which had not been previously noticed by anatomists, is particularly described by Mr. Toynbee in the paper read before the Royal Society. It is attached externally to the malleus, close to the insertion of the tensor tympani muscle, and internally to the cochleariform process.

The latter part of the paper is occupied by observations on the functions of the fibrous laminae, and of the tensor ligament of the *Membrana Tympani*; and it is shown that by these two antagonistic forces, the one tending to draw the *Membrana Tympani* outwards, the other inwards, this organ is maintained in a state of moderate tension, and is always in a condition to receive ordinary sonorous undulations.—*London Journal of Medicine*.

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#### PATHOLOGY AND PRACTICE OF MEDICINE.

*Peritonitis from Injury—Recovery.*—It is our pleasing duty to record a case of severe injury to the abdomen, followed by very acute peritonitis, where, by the agency of opium, a recovery was obtained, which, under the circumstances, might have hardly been expected. It is by watching cases of this nature that we become convinced of the inestimable value of opium, and it may safely be asserted that innumerable lives have been saved by this powerful therapeutic agent. Mr. G. Mitchinson, the dresser, was kind enough to furnish us with ample details touching this very instructive case, and we forthwith proceed to lay them before our readers.

The patient is a stout, healthy-looking little boy, five years and a-half old, who was brought to St. Bartholomew's Hospital on the 10th of July, and placed in Kenton Ward, under the care of Mr. Stanley. The poor little fellow had, a few moments before his admission, been knocked down by a cart, the wheel of which was distinctly seen by several persons to have passed over the abdomen across the umbilicus. Immediately after the accident, the boy is said to have got upon his feet, and to have run some paces; but he soon bent the body forward, and lay down.

When he was brought to the hospital, he kept tossing from side to side, and seemed to suffer excruciating pain in the abdomen. The respirations were forty in a minute, suppressed and very short; the pulse about 140, and small; but he was so restless that the arterial pulsations could hardly be counted. The child had not vomited or passed any blood per anum; he stated that he had emptied his bladder about half an hour before the accident, and had just had his dinner. This latter



statement can hardly be correct, as it is not very likely, as the dresser observed, that a child in that walk of life should dine at six.

However this may be, the little patient was at once given seven minims and-a-half of tincture of opium, and warm stupes were carefully applied to the abdomen. These means having given no relief, in about an hour the same dose of laudanum was repeated; the general symptoms remained the same; there was no vomiting, and the child was quite conscious. The patient remained in the same state during the next hour, rolling about in great agony. Neither the chest nor abdomen appeared to move much during respiration, which was short, frequent, and *catching*; the face was pale, but the extremities warm. As he was now inclined to doze, no more opium was given, though the child did *not* fall asleep, and went on tossing about, and moaning and crying with the pain in the abdomen. The same dose of laudanum was therefore repeated, and two ounces of wine given besides. In the night he was very restless; about an hour after the last dose of opium the child went to sleep, but woke several times, and complained bitterly of pain in his belly.

The bowels were not open towards the morning, nor was there any urine passed; a little retching took place, and the patient expectorated a small quantity of dark-coloured blood. During the day sleep was obtained; the pupils were, however, contracted, the respiration irregular though more natural and nasal. The pulse improved somewhat in volume, (130, intermittent), and the patient expressed himself as feeling better. On the third day, no urine had been passed since admission; an elastic catheter was therefore introduced into the bladder, and about eight ounces of clear and apparently healthy urine drawn off. The catheter was secured in the urethra, and about one ounce of turbid urine gradually drained away, loaded with an abundance of white flocculi.

When the patient awoke, about noon of the third day, he complained of great pain in the abdomen, and the respiration again became short and hurried; the child was given seven minims and a-half of tincture of opium, and two ounces of port wine; the urine on examination was found loaded with an abundance of lithates. Some milk and arrowroot were now taken with but little appetite, and the dose of laudanum, together with the wine, was repeated, but the child went on complaining of as much pain in the abdomen as before. On the fourth day he was somewhat quieter, and dozed a little; the pain and restlessness, however, soon returned, and the former was constantly referred to the abdomen. Tincture of opium, seven minims and a-half, and two ounces of wine. Towards the evening of this day, the ingestion of the opium was followed by marked relief: in fact, the child generally fell asleep about half an hour after taking each dose, and on awaking expressed himself relieved, although the pain never *ceased*, and after remaining awake a short time, it became so urgent, that he was afraid even to cough. He had, however, a little sleep for about two hours, after which time he was very restless and in pain.

The bowels had not been moved since admission; there was no vomiting, and the urine dribbled through the catheter. The same dose of opium and wine was repeated, and the patient now expressed great

anxiety to have his medicine administered. On the fourth day there was not much alteration, except a fit of coughing, which occasioned a great increase of pain; the opium was repeated. The pulse was now 120, regular, soft and slightly improved in volume; the tongue somewhat furred and dry; the bowels still confined; and the urine passing through the catheter. No pain in the chest. In the afternoon the child fell into a deep sleep, which lasted three hours; on awaking he expressed himself as feeling much better, though coughing still caused much pain in the umbilical region. The pulse improved in volume, and was soft and compressible; the pupils not being so contracted as heretofore. Opium and wine repeated.

On the fifth day the patient seemed free from, pain, and the countenance was somewhat more natural and less expressive of uneasiness; the fits of pain, however, soon returned; the face became again extremely anxious; the pulse harder, and the respiration hurried. The opium and wine were repeated three times in the day without subduing the pain, which was still much complained of. Bowels still confined. Thus the patient went on for the next three days improving a little at times, but ever being subject to severe attacks of abdominal pain; the bowels remained inactive until the tenth day after admission, when, after a good night, he awoke considerably better, did not take his usual dose of opium and had a copious alvine evacuation. The pulse fell to 74, was soft and compressible, and the abdomen began to bear moderate pressure. The next few days were marked by gradual improvement, the child seldom required medicine, and did not experience any pain but when he committed some dietetic indiscretion; and about twenty days after admission the little patient left the hospital, to all appearance perfectly well, and has since remained so.

This case beautifully illustrates the rule of practice which states that the great point in the treatment is to support the system under the intense irritation excited by the visceral inflammation, and that no substance is so well calculated to effect this as opium. We are likewise advised, in contusion of the abdomen to avoid purgatives and enemata; this precept was here applied with the utmost strictness, as no alvine evacuation took place for nine days. Many would have been tempted to add a little calomel to the opium; but when we recollect the intense inflammation which must have existed to give rise to such continued pain, we are driven to admit that the least excitement in the shape of peristaltic motion might have raised the inflammation to a fatal degree.

It would appear from this case, that it was a favorable circumstance that the wheel, instead of passing across the hypocondrium, pressed upon the umbilical region, for the liver and spleen offering in the first place greater resistance than the convolutions of intestines, are more likely to be lacerated, which circumstance is almost always followed by the death of the subject. It is interesting to observe what large quantities of opium are borne under a high state of irritation of the system; the patient, a boy five years and a half old, took about twenty-two minims of laudanum per diem for about ten days without any unpleasant symptoms, and even without an unusual amount of sleep. In witnessing such a case as the preceding, the question naturally arises,



whether the inflammation of the peritonæum has left any traces in the abdominal cavity, and whether the probable fibrinous exudations will eventually be absorbed, or interfere with the regular action of the bowels. The answer probably lies between the two extremes. We cannot close the report of this valuable case without adverting to the close connexion between medicine and surgery which is here illustrated, and we concur in the received opinion that a man cannot be a good surgeon, unless he at the same time be a good physician.—*Lon. Lancet.*

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*Hay Fever—Its Cause, and its Cure by Nux Vomica.*—Hay Fever or Hay Asthma, is (in England) a well known complaint, by which many—especially females, and those of irritable surface—are annually distressed during the droughts of summer. Daily, or more frequent paroxysms of difficult respiration, severe prolonged sneezing, and a burning pain in the nostrils, eyes and face, are the usual symptoms. Dr. Craigie and others doubt the common explanation of the cause of the affection, viz., that it depends upon irritation of the peripheral extremities of the imperfectly protected nerves of the nostrils, etc., by the subtile pollen of the innumerable flowers, especially the grasses, which bloom in May and June, and with which the atmosphere must in some localities, be greatly charged. In the vicinity of hay fields and wild pasturage, if the weather be dry, those who are susceptible are certain to suffer; whereas, a rainy season, or sojourn on the sea-coast, will enable such persons to escape. Observation of many such facts has fully satisfied us, that there is no good ground for the incredulity expressed in the following passage by Dr. Craigie. “A particular variety,” says he, “of catarrh, most prevalent in the summer months during the inflorescence of the hay crop, in certain situations, has been believed to be connected with some irritative vapor exhaled from the flowers of some of the grasses, and has therefore been distinguished by the name of Hay Fever. It is doubtful whether this idea of the origin of the disorder be well founded; and it seems quite as likely that it is produced, as other varieties of catarrh, by imprudent exposure during excessive heat. The liberties which are often taken during extreme hot weather, are sufficient to induce catarrhal disorders, without having recourse to the assumption of a peculiar emanation.” (*Practice of Physic*, vol. i, p. 823: Edin. 1847). We will venture to say, that no one who had seen such cases of Hay Fever as abound at this season, and as we have had to deal with during the present and former seasons, and who has carefully investigated into their personal and topographical peculiarities, could have written the paragraph just quoted. The popular theory is correct, that Hay Fever bears no relation whatever to common catarrh from exposure to cold. We feel assured that the cause and the cure in the two complaints are totally different.

We have been led to make these remarks, from having just perused a short note by Mr. G. T. Gream, in the *Lancet* of June 8th, 1850, p. 692, in which he recommends *Nux Vomica* as a cure for this troublesome complaint. He correctly remarks, that the efficacy of this method is not generally known. The following is the essential part of Mr.

Gream's paper: "I am indebted to my friend Mr. Hammerton, of St. George's Hospital, for suggesting to me the *nux vomica* as a remedy in this complaint, which has frequently caused me, personally, much annoyance. It was administered by a friend of his to large numbers of the country people in his neighborhood, who flocked to him annually for relief, having experienced so much benefit from it. Having taken it for three years with decided effect, and having for nearly that time prescribed it for others, with equal success, I feel bound to publish through your columns, if you will do me the favor to insert this letter, the results of its use in a harassing disorder, with which many persons are at this time threatened. The preparation recommended, and which I have always prescribed, is the tincture of *nux vomica* of the "Dublin Pharmacopœia." Ten drops of this should be given for a dose, in water, and increased gradually to twenty drops, three times a day: the action of it should at first be watched. It is an agreeable light bitter; increases the appetite; and influences the Schneiderian membrane, no doubt through the medium of the nerves. I have accompanied the administration of the tincture with the application of an ointment (as high up in the nostrils as possible) composed of one drachm and a half of Goulard's extract, two ounces of spermaceti cerate, and a few drops of oil of roses or of bergamot.—*Lond. Journ. Med.*

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*Incontinence of Urine in Children.* By J. SIMON, Esq., F. R. S. Surgeon to St. Thomas's Hospital.—Irritability of the bladder in children usually takes, with more or less completeness, the form of *incontinence of urine*: the child wets its bed. Whenever this symptom is presented to you, if you proceed to examine the urine (as in every such case you should do,) you may pretty confidently expect to find copious crystals of lithic acid. This condition of urine in children is very far from painless; and in severe cases the symptoms cannot at first sight be distinguished from those of calculus. The child makes water very often, and a little at a time, doubles itself up, and cries with the pain of each effort, and pinches and pulls its prepuce, just as it would with stone in the bladder. The pain experienced is a severe scalding in the urethra, and sometimes this passage will be so much irritated as to inflame and secrete pus. There was recently a case under my treatment which, though not one of incontinence of urine (for it was an adult), will yet serve to show the manner of dealing with inconveniences, generally, as depend on the passage of crystals of lithic acid in the urine. The patient, W. M., aged 22, had for two or three years suffered occasionally with symptoms, which made it probable that he had a calculus lodged in his left kidney; but the immediate cause of his admission to the hospital was the circumstance of his then habitually passing lithic acid gravel, occasionally mixed with blood. His urination was frequent and painful; his pulse was feeble, and he was of little muscular power; his skin acted fairly; his tongue was white and coated; his bowels a little constipated. I ordered him five grains of Plummer's pill every night till his tongue was quite clean, and then changed the treatment; giving him quin. disulph. gr. ii. twice



a day, and potass. bicarbon. half a drachm, five hours after his chief meal. He left the hospital after a month's stay, quite free from uneasiness in his urinary organs, and materially improved in general health.

This case will illustrate the sort of treatment which I generally pursue in similar instances of chemical derangement of the urine. If the tongue is coated, and if (as is usually the case with children) the intestinal secretions are unhealthy, I give hydrarg. c. creta, or some other preparation of mercury, till that evil is remedied; I then commence the exhibition of alkalies, giving usually a single large dose daily, after the completion of the digestion of the chief meal of the day; and almost invariably I find it highly advantageous to give quinine twice a day during the same period. In my hands it has answered far better than any preparation of iron, and especially so in the combination I have mentioned. I give it usually before breakfast and before dinner, and the alkali, in copious solution, five hours after the latter meal. Extreme attention to the quantity, quality, and simplicity of the diet, is essential.

With this treatment you will seldom, I think, have occasion to resort to blistering over the sacrum, and other measures of a similar nature, which have been recommended for the cure of incontinence of urine in children.—*Lancet*.

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*Illustrations of the Difficulties which beset the Diagnosis of some Cases of Disease.* By THOMAS POYSER, Esq., Fellow of the Royal College of Surgeons of England.—I have been much gratified by the perusal of a paper in the London Journal of Medicine for May, by Dr. Semple, on "Diseases of the Nervous System." The cases which he so candidly and graphically describes, are familiar to all who are in extensive practice, and show but too clearly, that in a great variety of cases which terminate fatally, the symptoms during life do not develop the true seat and nature of the malady. The great attention that has of late years been paid to general and morbid anatomy, and to pathology, with the mechanical aids that have been had recourse to, for the investigation of diseases, as well as the more patient and inductive method of studying them by those who practice medicine as a science, have no doubt tended materially to render diagnosis and symptomatology more clear and specific; yet there is still a wide field open, in this most important department of medical practice, for future explorers.

To ascertain the true pathological cause of disease is confessedly the most difficult, as it is the most important part of medical practice. Indeed, as Celsus has well observed, "*æstimatio causæ sæpe morbum solvit.*" Many causes, however, concur in practice, but more especially in the country, to render the patient observation of disease difficult, if not almost impracticable. Extensive practice, while it renders the practitioner familiar with the phenomena of disease and its terminations and best means of cure, leaves rarely much leisure for the niceties of physical and chemical exploration, required in obscure cases. They who have the most extensive field of practice, are apt, in the hurry of business, to depend on tact, a sort of intuitive gift, like the *tactus eruditus* of the surgeon: and hence their examination of cases is apt to become habitually superficial, and a routine mode of prescribing

is also, from the same cause, too often allowed to usurp the place of rational treatment.

I do not state this to the disparagement of the general practitioners, than whom a more painstaking, intelligent or conscientious body of men does not exist, in our own or any other profession. But we cannot expect impossibilities; and the multiplicity and diversity of cases which the well-employed medical man has to visit daily, if spread over a great extent of country, forbid that minute attention and examination which are frequently required.

Another hindrance to the complete investigation of disease, when it terminates unfavorably in the country, is the great repugnance to *post-mortem* examinations. In large towns and public institutions this prejudice is not so strong; but in some rural districts, a request to have a *post-mortem* inquiry almost invariably gives offence to the relatives, and is very rarely permitted. The country practitioner has seldom, therefore, an opportunity of verifying his diagnosis by a *post-mortem* examination; and if he had doubts on his mind as to the cause and seat of the disease, during the life of his patient, those doubts have little chance of being cleared up by his death.

Occasionally, however, a post-mortem examination is allowed, and then we sometimes find that the true seat of the disease is revealed, which during life was not suspected, nor indicated by the symptoms. These unlooked-for terminations of disease are seldom given to the public; as they imply, (though often unjustly,) a want of skill, or perspicacity, in the medical attendant: while periodical works teem with cases terminating favorably, or where the examination after death proves the diagnostic skill of the narrator. In systematic treatises, too, and monographs on particular diseases, the general history of the symptoms, treatment, and termination of the ailment, proceeds too smoothly to meet the exigencies and stern realities of actual practice. Untoward and unlooked for terminations of disease are seldom adverted to, or recorded; and yet these furnish the most important and instructive part of the history, as they are beacons or landmarks for future inquiries.

In the short but elegant preface to the transactions of the College of Physicians, written, as is generally supposed, by the late Dr. Heberden, is this paragraph: "It is to be wished, that writers would not confine themselves to relate only their successful practice. A physician of great experience might write a very useful paper, if he would have the courage to give an account of such methods of cure only, as he had found to be ineffectual or hurtful." With the wish to further a suggestion coming from such high authority, I published a few years ago, in the fifth volume of the Transactions of the Provincial Medical and Surgical Association, some cases and dissections "to show the uncertainty and difficulty of diagnosis; from the symptoms during life not being indicative of, or bearing any proportion to, the extent of morbid lesion discoverable after death." The cases to be offered to the readers of the LONDON JOURNAL OF MEDICINE, may be regarded as a continuation of these reports. Having no system to establish, or theory to support, they will be selected indiscriminately, from notes taken at the time: and although, perhaps, but little may be learned from them in the way of practice, yet



I trust that, from the reasons above stated, they will not be found uninteresting or useless. An important object will be answered by their publication, if it induce others, whose opportunities of observation from public hospitals and other sources are much greater than mine, to publish such results of their experience, as may illustrate the difficulties which beset the diagnosis of some cases of disease.

**CASE I. OBSCURE NEURALGIC PAINS: DISEASE OF THE BRAIN, AND ENLARGEMENT OF THE LIVER.** Mrs. —, aged 40, the mother of a large family, and a lady of great intellectual attainments, who had usually been in the enjoyment of good health, was attacked in the Autumn of 1844 with acute pain in the right groin, or rather in the inner and upper margin of the ilium. The pain was limited in extent, and might be covered, as she expressed it, with her finger, but was so acute as to deprive her almost entirely of sleep, and to render any motion of the part nearly insupportable. There was no swelling, redness, nor any appearance of inflammation. This pain continued some months, without varying its seat or character, and but little controlled by treatment.

It was considered to be neuralgic; and every means that could be suggested, both constitutional and local, were tried by an eminent surgeon who then attended the case. During the progress of this affection, Mrs. — herself discovered, while in bed, (to which she had long been confined by the neuralgic pain,) a swelling in the right side below the liver. On examination, this viscus was found much enlarged, extending four or five inches below its normal size and situation, of a stony hardness; but unattended with pain or tenderness on pressure. It seemed to account for the pelvic pain, inasmuch as the pressure from this indurated mass on the nerves might occasion it. Mercury with taraxacum, and iodine and mercurial frictions, were therefore had recourse to, without any alleviation of pain, or diminution of the hepatic disease.

In the Spring of 1845, the patient was removed to her mother's house in this neighborhood, and on April 5th I saw her. In addition to the enlargement of the liver, and the acute pain on the inner margin of the crista ilii, there was now tympanitis, the bowels being enormously distended with flatus. There was no pain in the head, no fever, and the pulse and tongue were natural: but there was a degree of irritability of mind and fretfulness which was remarkable, as Mrs. —'s natural disposition was peculiarly placid and gentle. It is unnecessary to detail the treatment, as but little or no relief was obtained from it.

The tinctura cannabis indicæ soothed and tranquillized the nervous feelings; and the unguentum aconiti as a local application, (suggested by Sir Benjamin Brodie, who was consulted,) in some degree assuaged the pain; but the general character of the symptoms continued unabated; till about the middle of April, when the pain began to diminish, and, in two or three days, went off altogether. After the removal of the pain, Mrs. —'s spirit and appetite improved; she was able to sit up and walk about her room; and although the tympanitic swelling and enlargement of the liver did not diminish, yet she was cheered by the freedom from pain, and the prospect of recovery.

On the 28th of April, while sitting in her chair, Mrs. — had an apoplectic seizure, which deprived her of speech and the power of swallowing, from which she never rallied. She expired May 3rd.

*A post-mortem examination* was made thirty-six hours after death. On removing the calvarium, the external part of the brain presented no diseased appearance; but, on cutting into the left hemisphere, it was found to be quite degenerated in structure. The whole of the anterior lobe was converted into a thick purulent fluid; and, in the middle of this large abscess, there was a clot of blood of the size of a walnut. This coagulum appeared to be of recent formation. The left middle lobe was pulpy and diseased, but the other parts of the cerebrum and cerebellum had a firm consistence and healthy structure. The abdomen was very large, from the bowels being enormously distended with flatus, but there was no extravasated fluid or gas in the cavity. The left lobe of the liver presented a very diseased appearance. It was enlarged to more than twice its usual size, had almost a stony hardness, was mottled and tuberculated externally, and on cutting into it, its texture was gristly and exhibited that diseased structure termed mammary sarcoma. The inner edge of the ilium, where the pain had existed so many months, was carefully examined, but there was no morbid appearance discoverable in the part, or in the nerves leading to it. The thorax was not opened.

REMARKS. This case is, I think, interesting, and worthy to be recorded. It shows that the symptoms did not point to the true seat of disease, till a short time before the patient's death; and that extensive disorganization may be going on in the brain, without impairing its functions, or manifesting those signs by which it may be detected. The fretful and altered manner of the patient led to the apprehension that softening of the brain might be going on; but the total absence of pain in the head, and of rigors, or any indication of inflammatory action, rendered the diagnosis very difficult. It is highly probable, that the pain in the right side of the pelvis was occasioned by disease of the left side of the brain, and furnishes an additional instance to those recorded by Sir Henry Hallford, where neuralgia was the effect of cerebral disorganization. When the latter disease had so far advanced as to disqualify the nerves from suffering so exquisitely, then the pain ceased. The case shows the importance of attending to the brain, in all long-continued and obscure neuralgic pains, although the functions of that organ may not be impaired.—*London Journal of Medicine.*

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## SURGERY.

*Popliteal Aneurism; Tying of the Femoral Artery; Recovery. A New Aneurism-Needle.*—It is interesting to look back on the various phases of the treatment of external aneurism, and modern surgery may well be proud of the gigantic strides which have been made within the last hundred years. Hunter's and Scarpa's share in these improvements must ever give them a place (where this even their only merit) among the benefactors of the human race. But great credit is likewise due to surgeons of our own times for reviving the use of compression, regulated so as to lessen the force of the circulation, and to promote the solidification of the aneurismal tumour; and the Irish school has done



much to promote the improvements in the instruments used for that purpose. Dr. Bellingham, who has worthily labored in the cause of compression, has not yet succeeded in converting all his professional brethren to his opinion, if we are to judge from the London practice, and from the condemnations which have issued from North Britain. As the question is still *sub judice*, it would be rash and presumptuous to offer a decided opinion on the subject; but we will venture to say, that it would be extremely useful if a competent surgeon would take the trouble of partially examining the question, and give the profession his opinion, not whether one of the two lines of practice (the ligature or compression) is the best, but in which cases and under what circumstances, either is to be applied.

It will be perceived by the following case, that Mr. Le Gros Clark is not wedded to any particular mode of treating such cases, for he would have tried compression whilst his patient was in a favourable condition for such treatment, but resorted to the ligature when delay had put other means out of the question. We proceed to give an outline of the case.

The patient is a man of forty-eight, robust, and of florid complexion, accustomed to active exercise, being a woodman on a large estate. He was admitted into St. Thomas's Hospital, June 15th, under the care of Mr. Le Gros Clark. About six months before the patient presented himself at the hospital, his attention was attracted to the affected limb by a pain extending from the hip to the ankle, and especially about the knee. He applied to Mr. Curtis, of Harting, Sussex, who at once detected a swelling in the ham, and ascertained its nature to be aneurismal. There was some œdema of the leg at the time. The patient was first seen by Mr. Clark, March 24th, who urged him to enter the hospital at once, but the patient declined doing so. The tumor was *then* about the size of a duck's egg, and occupied the upper and *outer* part of the popliteal space; it pulsated strongly, but the impulse could be arrested by pressure on the femoral artery, and the sac partially emptied. When admitted in June, however, nearly the *whole* ham was occupied by the tumour, which was also much more solid than before, from the increased deposit of fibrine, so that but little impression could be made on the sac by pressure on the artery. The pain in the limb was very great, and described as sometimes excessive; the thigh and leg presenting a certain amount of œdema and venous congestion. The patient had been following his usual occupations up to this admission, his health was good, and the viscera of the chest were found in a normal state.

After the man had been duly prepared, Mr. Le Gros Clark tied the femoral artery, in the usual way, five days after admission. The patient proved very excitable both during and after the operation. In the evening the temperature of the operated limb was slightly below that of the sound one; there was no pulsation either in the sac or arteries; and as the excitability continued, twenty minims of Battley's solution were ordered, and to be repeated if necessary. Two doses were required to procure rest, and on the next day the wound looked healthy;

the pulse was 106, the skin hot and thirst great. Temperature of the popliteal space on the operated side,  $101^{\circ}$ , on the sound side  $99\frac{1}{2}^{\circ}$ . On the second day, Mr. Clark, finding his patient rather weak, ordered two ounces of gin, which had been the man's accustomed beverage; and on the third he expressed a desire for food. The wound looking rather sluggish, the diet was gradually increased, and the patient improved rapidly. On the fifteenth day the ligature came away in the dressings, and the patient returned home (the wound being nearly healed) about one month after the operation; there had been no pulsation either in the sac or arteries, below the ligature, since the latter had been applied. The patient was seen about three weeks after his discharge, and was doing well.

Mr. Le Gros Clark remarked at the time of the operation, that when he saw the patient at an earlier period he urged him to submit at once to treatment for the cure of the disease; and he had intended trying compression on the femoral artery at two different points, so as to keep up a certain amount of resistance to the flow of blood without risk to the superjacent soft parts. The progress of the disease, the increased size of the tumor, now occupying the entire popliteal space; the œdema of the limb, the suffering of the patient, and his extreme constitutional excitability all concurred in forbidding that course. The application of a ligature on the trunk of the artery, in the usual position, was, therefore the only alternative which offered itself.

Mr. Clark used in this operation a new aneurism needle, manufactured by Mr. Bigg, of St. Thomas's-street.

This needle is composed of an oval silver stem, a portion of the the extremity of which (about half an inch) is hollow, to receive the point, which is bulbous, and takes off at will. This bulb has a thin prolongation backwards, containing the eye, so that the ligature is concealed within the cavity of the bend of the instrument, and hangs loosely from its posterior aspect, a few lines below the beginning of the curve. The thread being thus disposed, offers no obstruction whilst the needle is passing under the artery; and when the operator finds it necessary to cut through any fascia that may resist the point of the instrument, he does not run the risk of dividing the silk. The needle is furnished with an ivory handle, having two deep notches cut in the end, for the purpose of winding the ligature round the extremity of the handle, and rendering the instrument firm. Simplicity seems to be the great quality of this needle; for in Mott's the point is screwed off from behind the curve; in Kirby's there is a loose pair of forceps resting in a groove, which seizes the point of the needle, and withdraws it from the sheath or handle; and Le Strange has added a sliding canula to Mott's needle by which the screw is fixed, and the possibility of the point shifting during the operation prevented. In fact, several aneurism needles have been invented to accomplish the purposes above described, but, from their complicated nature, have one after another been laid aside,—*London Lancet*.

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*Obliterated Brachial Artery, with Compound Fracture of the Humerus.*—When a limb has suffered compound fracture of a severe des-



cription, the question of amputation will be materially influenced by the amount of injury which the large vessels have sustained; and it has in general been found an excellent rule to remove the limb when an important artery is wounded, and the other circumstances of the case do not contra-indicate such an operation. But it may happen that a compound fracture may be accompanied by an injury to the principal artery of the limb, which, without wounding the same, may suspend the circulation through it; in such case the rule is not so clear, and the surgeon must evidently be guided by various considerations before he determines on a decided course. The more or less likelihood of the circulation being re-established by the collateral vessels must of course have considerable weight in the question. A case of this description came lately under the care of Mr. Hawkins, and we consider that it will be extremely useful to report it with full details, as such instances are calculated to serve as guides in cases of a similar nature. We are indebted for the particulars to Mr. Francis Day, one of Mr. Hawkins's dressers.

The patient is a market gardener, twenty-eight years of age, who was admitted into St. George's hospital, under the care of Mr. Hawkins, June 4th, 1850. He is tall and healthy in appearance, but of very drunken habits, and when received into the hospital, at three o'clock in the morning, he was in a state of intoxication and more or less collapse. An hour before, he had suffered a severe compound fracture of the right arm, caused by falling off the shafts of a wagon, the wheel of which passed over the arm. On examination, three wounds were seen near the seat of the fracture, the latter being situated about the upper part of the middle third of the humerus. One of the wounds was situated on the outer side of the arm; it was about two inches long, and bone was easily detected at the bottom of it, the soft parts within this solution of continuity being greatly destroyed. Two other wounds were noticed on the inner and the posterior part of the arm; muscle protruded through them, and blood likewise exuded, but to a small amount. The patient was reported not to have lost any more blood than was seen on the sleeve, which was saturated to some extent, but not alarmingly. The hand was perfectly cold, but as the whole surface of the body presented a very low temperature, the coldness of the hand was attributed partly to the state of collapse, and partly to the loss of blood.

The limb was placed on an angular splint, the edges of the wound brought together by a plaster, and three splints applied, one to the inner, a second to the outer, and the third to the anterior surface of the arm; the latter being raised on a cushion. The collapse having passed off in a few hours, the hand and forearm were found to be still cold; and sensation seemed to be more or less lost on the outer side of the thumb, and index finger, and at the back of the hand. Pulsation could be felt in the brachial artery, above the seat of the fracture, but none could be detected at the bend of the elbow, or at the radial or ulnar arteries. The hand had, however, retained its natural color, the face was flushed, and the patient seemed to be in great pain. A consultation was held in the middle of the day, when it was decided not to amputate the arm at

once, but to wait and see whether collateral circulation would be established, reserving the removal of the limb till gangrene had commenced.

The patient, though he took an opiate, suffered great pain during the night, and the next day the forearm and hand were still cold, nor had any appreciable sensation returned to these parts. Ammonia, in saline draughts, and an opiate, were prescribed; but on the third day the skin at the end of the elbow was found in a state of gangrene, and vesicated; and as the wounds looked rather tense, a few incisions were made into them with great relief. Patient was ordered good diet and porter, but on the fourth day the gangrene began to spread on the outside of the arm, and severe symptomatic fever set in, with great pain in the side and abdomen. On the fifth day, the gangrene involved the deeper structures, and Mr. Hawkins then resolved, after consultation, to amputate immediately.

The patient was placed under the influence of chloroform, and Mr. Hawkins, taking his stand to the inside of the arm, so as to steady the comminuted parts during the process of sawing, removed the limb by the circular incision about an inch and a half from the shoulder-joint, the subclavian artery being compressed by Mr. Prescott Hewett above the clavicle.

The patient proceeded very favorably after the operation; nothing of importance happened during the next two months, at the expiration of which the stump was quite healed, and the patient discharged in good condition.

A careful dissection of the amputated arm showed that superficial gangrene had occurred in several places, affecting large patches of skin, both in the arm and forearm; in the latter, however, it was only in an incipient stage. Lymph and serum were effused in the subcutaneous tissues throughout the limb, but especially in the arm; in the latter region there were also large cavities containing ill-formed pus, both in the subcutaneous and deeper textures. The muscles at the middle part of the arm were much torn, and the bone, broken at its centre, was comminuted and bathed in pus. Both the superficial and deep veins were extensively clogged up by coagula, especially the *venæ comites* of the brachial artery. The latter was also found blocked up by a firm coagulum adhering to its internal coat, measuring about one inch in length. This coagulum was situated at about three inches above the elbow joint; the other portions of the artery were pervious, and quite sound, and the nerves were not found injured.

It would appear that the violence of the injury, when it reached the brachial artery, principally affected the inner and perhaps the middle coat, in the manner of the ligature, producing, like the latter, a complete obliteration of the vessel. It can hardly be wondered at that the collateral circulation did not become established, for that beautiful provision of nature may sometimes be tardy even in a perfectly sound limb, and partial gangrene take place, so that there was but a small chance of the collateral branches acting powerfully in this instance, as the whole limb had suffered so great a shock. Thus amputation was the only means of saving life, and the healing of the stump required no small amount of care, as the patient had undermined his health by habits of intemperance.—*London Lancet*.